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COMPETITIVENESS AND THE QUALITY OF THE AMERICAN WORK FORCE

HEARINGS

BEFORE THE

SUBCOMMITTEE ON
EDUCATION AND HEALTH

OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

ONE HUNDREDTH CONGRESS

FIRST SESSION

PART 2

OCTOBER 29, NOVEMBER 10, 19, AND DECEMBER 3, 1987

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COMPETITIVENESS AND THE QUALITY OF THE AMERICAN WORK FORCE

THURSDAY, OCTOBER 29, 1987

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON EDUCATION AND HEALTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:40 a.m., in room 2359, Rayburn House Office Building, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Present: Representative Scheuer.

Also present: Deborah Matz, Chris Frenze, and Dayna Hutchings, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE SCHEUER, CHAIRMAN

Representative SCHEUER. Good morning. This is the 6th day of our hearings on Competitiveness and the Quality of the American Work Force.

We have all been very impressed by the quality of the testimony which has been presented in the first 5 days of hearings and also very concerned about the seriousness of the implications of what we've heard.

We have a splendid panel here this morning, but before we hear from the panel of five speakers, we are going to hear from a speaker who is a resident of London. He will give us his view of the importance of America becoming a competitive force in world economic affairs and a successful player in the global marketplace. So we are going to hear from Mr. Arnold Simkin for 8 or 10 minutes first and then we will have some questions for him.

Arnold Simkin is a very distinguished American economist. For many years he was chief international economist for Merrill Lynch, Pierce, Fenner & Smith. Of all the economists I've ever known, he is the one who has most truly a pure and sophisticated global view.

He now is in business for himself, Stratecon Corp., I think is the name of his company, but he remains a powerful intellectual force in international economic thinking.

So it's a great pleasure for me to introduce Arnold Simkin, of London, to chat with us for 8 or 10 minutes about his perception of the need for America to make significant progress in producing an effective and competent work force and becoming a more productive society. Please proceed, Mr. Simkin.

STATEMENT OF ARNOLD P. SIMKIN, LONDON REPRESENTATIVE, STRATECON CORP.

Mr. SIMKIN. Thank you.

Representative SCHEUER. And above all, I urge you not to read from any prepared statement. Just pretend that you are once again in my living room.

Mr. SIMKIN. Fair enough.

Representative SCHEUER. And once again lecturing me on how Congress should straighten up and fly right and do its job with a maximum of competence and effectiveness.

Mr. SIMKIN. OK. I think the first thing that I noticed when I was sent the list of people who were going to testify was that the emphasis appeared to be on the question of literacy in the work force. It focused mainly on the question of literacy of staff, you may say. The implication that I got looking at the list of topics was that we were going to hear a lot about the literacy and productivity of staff.

Representative SCHEUER. Of workers.

Mr. SIMKIN. Of workers, yes. I think the issue is probably a lot broader than that. As an economist, you look at productivity and you think of productivity of labor, but there's also productivity as a management issue and productivity of capital. And you can't separate the three.

The other thing that I think needs to be said is that in the case of the United States and in the case of any country, the productivity issue really divides into two. There is the total productivity of the work force. Then you look at where the workers are working. Increasingly, in the United States, the workers are working in service industries. The productivity growth potential in these service industries is almost definitionally limited.

For example, take old-age care. It's largely one on one. Any effort you might make to improve productivity of that kind of care probably will result in a degree of callousness. So the productivity improvement of the work force generally, given the growth of services, is actually limited. What has to happen, I think, is that the productivity growth in the industrial sector must grow much faster to offset the sluggish growth of productivity in the services.

This is an economic issue, but it's an issue that you've got to face in looking at productivity overall.

The other question, of course, is why has America's productivity slipped so badly relative to those of other countries? In large measure, looking at it as a service-versus-industry issue, it's clear that it's because services have been growing much more rapidly in the United States than they have in other industrialized countries.

On the other side of this, there is a very serious management problem in America. Look at management in the United States and compare the approaches taken here with those taken, say, in Japan or Germany. You come to some very, very frightening observations.

For example, there are no Japanese home-grown MBA's. The manufacturing companies are all run by engineers—designers, engineers: people who make things; people who have a sensitivity to producing. They have a bottom-line consciousness, make no mistake about it. But they have a bottom-line consciousness which has a different approach, a different approach to the product, a different approach to staff.

Looking at the United States from a distance I detect that part of the productivity problem here is management's almost callous disregard for the work force. There is a pervasive "I don't give a darn" attitude by the work force in response. The combination reduces productivity. It has nothing to do with literacy. It has to do with attitudes. It's a management problem.

There are other issues involved in this question of productivity. Our workweeks are probably too short, compared to our real competitors. All through Asia people work 5½-day weeks. Now you're going to say, but that's our high living standard. Well, maybe we can't afford it anymore.

I'm not convinced that poor levels of literacy are responsible for the low growth of productivity in the United States. I don't think that's the issue at all. I think, in fact, it's a part of the answer at best.

For example, we have somehow lost the ability to teach kids to think in school, not just to teach them to read and write. There is something that has happened here in the United States which I have called the moron effect. The company which goes out and spends millions of dollars on computerization and, therefore, incurs a very large cost. Then, to offset the high cost of its capital investment it hires morons to run these very complicated machines. And the people who formerly performed these jobs are either promoted to supervisory status, or fired. The result is no productivity improvement, but a higher cost level. And you don't need me to tell you that it happens often in almost any approach you make to the services in the United States, whether it's bank, airline company, the telephone people, a hotel, you name it.

It is partly a function of management, of mismanagement. You're not going to improve it simply by creating another program and training people to smile nicely or to say "good morning" brightly.

The other factor in this literacy question which I didn't see addressed is the question of dyslexia. I know I was warned not to mention it, but the fact remains that a substantial proportion, perhaps as high as 20 percent of the American population, has some learning disability. If it hasn't been recognized early enough, it may be diagnosed as illiteracy.

I'm struck by comments of Japanese and European managers that in their factories in the United States, productivity levels are as high as they are back home. Now maybe that's because they preselect their staff more carefully. I don't know. But the fact remains that these types of comments come up from time to time and one rarely hears the comment, "Oh, well, the American workers are just a bunch of boobs."

I'm not sure that the issue is low productivity because of low literacy levels. I think it's far, far, more complicated. It runs to a much greater extent to management, almost the unspoken subject. We've got a serious management problem in America. They're all literate or mostly, but they have lost contact with what they really ought to be doing.

One of the reasons why the Japanese have managed to maintain such high levels of productivity is that the staff and the managers all work on the same team. Again, yes, part of it is literacy. But part of it is just cooperation and mutual respect. These are attitudinal problems.

And increasingly, in the robotized factories that we're going to have, I'm not sure that the literacy issue is going to be that important. Much more important is going to be the will to work. I have used my 8 minutes.

[The prepared statement of Mr. Simkin follows:]

PREPARED STATEMENT OF ARNOLD P. SIMKIN

American productivity growth is weak. Some figures. Total productivity grew at a 0.7% average annual rate between 1973 and 1985. Compare that to 2.5% in Japan, 1.8% in France and Britain, and 1.6% in Germany. Arguably, America's productivity level was higher than it was in other industrialized countries, say, ten or fifteen years ago. Total productivity should not be confused with one of its components: industrial productivity. Generally, industry's productivity growth has been faster than the total. In this respect, the American performance has been in line with its competitors. Thus, industrial productivity growth rates seem to have been in line with those in the major Western European countries during the past fifteen years. It's nothing to cheer about. It's not news that American industrial productivity growth is well below Japan's. In this analysis, I'm going to examine the probable causes of America's low productivity growth.

Productivity is a complex issue. In a sense, it has three elements: labor, management, capital. These hearings have concentrated on labor and its literacy. That's important. Even more important would be to try teaching people to think. That may depend to some extent on improving their literacy. Congressman Scheuer has asked me not to mention one subject. So, I won't dwell on it. But it's only fair to note that one of the reasons many Americans find it difficult to read is that they have a learning disability: dyslexia, for example. Some estimates place the proportion of the population so disabled as high as 20%. Learning disabilities frequently are not diagnosed, or not diagnosed correctly. The result? An apparent illiterate. Enough said.

It points to another part of the literacy problem: professional educators. Not teachers. Professional educators, the establishment. This may offend some people. Amd I'm sorry about that. Still. My impression is that frequently analyses tend to confuse the problem with the solution. Is illiteracy the problem? Or, does the problem have deeper roots? I sense that professional educators tend to treat students with the same "care" as social workers treat their clients. To me, it is the illusion of caring. The reality may be different. It seems to be systematic nest feathering, to the disadvantage of the supposed beneficiaries. Thus, I find it hard to understand how it's possible that kids leave school unable to read, and worse . . . unable to think. I'm not blaming teachers. Rather, I think we should be examining a system which has dropped the acceptable standard to the point where the acceptable is pitifully low. Worse. America's educational standard seems to be well below the standards in the countries we should be worrying about: mainly scattered around the Pacific perimeter. But it's not just standards that need to be examined. By now, I suspect I've antagonized many. But I'm troubled by the finger pointing: at the kids, the teachers, or the political leadership. Rarely is it pointed at the system's beneficiaries, who should be the kids, but seem to be the professional educators.

Now, to subjects more economic. America's economy is becoming more and more service centered. That's had several implications. Let's look at them. One. In services, opportunities for productivity improvements are fewer. In part, that's because many services are performed on a one-on-one basis, making factory-like replication difficult - or impossible - to achieve. Two. Services often are menial. They are frequently performed most efficiently by people with average - or below average - intelligence. Of itself, this surely depresses productivity. Three. As personal services expand, they require more and more people. It means a growing labor force. That suggests the intelligence level of the country's work force has been averaging down, so to speak.

Consider the "moron effect." Companies want to improve their efficiency. So management decides to computerize. Millions are invested. Costs rise. To reduce costs, management hires lower-wage staff. Employees who used to do the same jobs are fired or promoted to supervisor. Result? Costs rise because productivity levels of the new hires are abysmal. Call it what you want. You may argue it's labor's shortcoming. It isn't. It's bad management. There are two types of services. One type can be automated to a very considerable degree. It includes banking, or public transportation. The other type of service is personal. Some of these personal services are hard to automate, such as geriatric care, or certain professional services. For the moment, there's not much we can do to improve the productivity of those employed in geriatric care, for example, as such efficiencies could result in what appears to be callousness. The rapid growth of the services sector, therefore, has been a key element behind America's weak productivity growth.

American productivity compares unfavorably internationally. That's mainly because services are growing at a much faster tempo in the United States than they are in other industrialized countries. There's another way to look at the subject. Productivity growth elsewhere in the economy - and that's mainly industry - is not strong enough to offset the sluggishness of productivity growth in the services sector. And here we come to the problem's crux: industry's productivity growth is just not fast enough. That's a management problem. There are several probable causes. Either the capital investment is inadequate. Or, the managers are not getting the best out of their staffs. It's probably some of both.

Look at the Japanese. Americans of late have been working themselves into a national tizzy trying to figure out why Japanese business is more efficient than American business. Immediately, fingers are pointed at the systems' differences. And there's no question but there are some big differences. There are differences in capital costs: Japan's are lower. There are differences in business' time horizons: Japan's typically are longer. And there are differences in how decisions are made. The consequence is a business sector which invests differently. Yes. They buy machinery. And yes. They make things. But the Japanese seem to get more out of their machines than do their American counterparts.

That's called productivity. And you've got to ask yourself how they do it. One thing's for sure. The Japanese aren't supermen. There are differences, however. They work longer days. They work more days a year. That, of course, doesn't necessarily mean higher labor productivity. But is does mean higher capital productivity. There are also some big differences between Japanese and American workers. Japanese workers, for example, are rarely illiterate, or even functionally illiterate. Japanese workers seem strongly motivated. They seem secure. It has little to do with salaries, which are determined by their educational level at the time they entered the work force, and then by age. The motivation? To improve the company's - and the country's - strength. Try selling that in the United States!

There is a managerial difference. Key decisions are made consensually. So, workers are involved in an early stage of the decision-making process. It helps. It also helps that most Japanese manufacturing companies are run by people with technical - or engineering - backgrounds. There are few Japanese MBAs. And there aren't any home-grown ones. The implication is that companies - at least in industry - tend to be run by people whose training is in making things. Managers can be respected because of their technical proficiency, and not just because they sit behind big desks.

Start with managers who are technically oriented. And the system gets driven by a desire to improve the product - or to lower the cost at which it's manufactured. Price is secondary. Cost is primary. Simply put, cost cutting can take two forms. Which form it takes depends on the manager's background.

Compare how American and Japanese managers handled currency overvaluation. It made the prices of internationally-traded goods expensive in other markets. It made domestically-made goods expensive at home. Overvaluation happened first to the dollar. As the dollar's exchange rate rose, American industry became less and less competitive. The response? Plants were closed. Workers were laid off. That cut costs. To maintain cash flow, research and development spending was cut.

And plant-and-equipment investment programs were slowed. At the same time, factories were built abroad, mainly in the Pacific basin, Latin America, and the Caribbean.

Now, look at the Japanese response. It was slightly - but importantly - different. Yes. Some plants were closed. Yes. Workers were laid off. But they were relatively few in number. Yes. Factories have been built overseas. They're absolutely up-to-date operations. However, they're mainly producing slightly out-of-date products: those which are no longer cost effective to produce in Japan. Looked at another way, many of the products being produced by Japanese companies in their foreign factories are those which will no longer command a high enough price in foreign markets to justify their being produced in Japan. After all, the aim is to preserve jobs in Japan: demonstrating management's concern for staff welfare. It's the rare American company that demonstrates the same concern. Sure. The words are right. But the actions frequently belie the words.

Japan's industrial product mix is changing rapidly. Such change is less evident in the United States. Despite a yen now worth roundly 140 to the dollar, there are many Japanese executives who will admit they can earn a satisfactory return on investment even if the yen rises to 130 to the dollar. It's no miracle. It's due mainly to a rapid industrial productivity gain.

America's situation is not hopeless. However, on present prospects, things may well get much worse before they get better. That said, I'm not convinced there's much point in spending billions of dollars on new programs to improve literacy without many other changes being adopted at the same time. From my perspective, therefore, it's probably a waste of money to try fighting illiteracy without overhauling the country's educational system. A big anti-illiteracy campaign probably would wind up feathering the nests of the program's administrators. It's success is doubtful. And it's impact on productivity more doubtful still.

If we're going to spend billions to improve our human capital, we'd probably get more bang for our bucks if we spend the money providing incentives to improve - or broaden - the incentives for engineering education. Somehow, at the same time, we'll need to create some disincentives for young people to study law and business. Yes. Both subjects have earned their place. But the law schools and the b-schools have produced a wave of graduates who have become parasitical to American business. These people are creating an intolerable cost burden for American companies, both in the services and in manufacturing. In effect, the costs have been offset by investing less in plant and equipment. That's been a major factor squeezing productivity growth. Reducing illiteracy is an admirable social goal. However, the impact of such programs on productivity will be small.

Some of you in this room may remember when made in U.S.A. meant the best. That's no longer the case. But in the old days when American industry produced the best goods, and American services were performed by thinking people - not morons - companies were not run by MBAs. In those days, too, the burdens imposed on companies by government were far fewer. So, it's not surprising that productivity growth was faster. Admittedly, the level of productivity was lower. I'm not advocating that we try to roll back time. But we need a rethink of our entire educational system to enable the economy to benefit from the productivity improvements which might be gained if there were to be less illiteracy.

Representative SCHEUER. You question whether we can afford a 5-day week. Can our school kids afford a 180-day year?

Mr. SIMKIN. No way.

Representative SCHEUER. Compared to the Japanese who study 240 days?

Mr. SIMKIN. Or even kids across Europe who have somewhat shorter school years than the Japanese but much longer schooldays. You see the little kids in Paris trundling off to school at 8 o'clock in the morning. They don't get home until 4:30 or 5 in the afternoon.

Representative SCHEUER. Felix Rohatyn was quoted in the New York Times last week advocating that New York think about a year-round school system. He said, why should we have our schools open half the time, half the year instead of most of the time, most of the year?

Mr. SIMKIN. Right. It's not only a waste of capital resources, for whatever it's worth, but the original purpose of having these long vacations disappeared before the beginning of this century. That was, of course, to supplement the family labor force on the farm, in an era of family farms.

Representative SCHEUER. It hasn't quite disappeared. We've had testimony on this question. I have been a strong supporter of the concept of the year-round school system, but it's very difficult. First of all the parents oppose it. They don't want the kids around.

Mr. SIMKIN. It's a little late in the day to think about that I suppose.

Representative SCHEUER. Yes; it's true. They want the kids out. And they also want the kids to be able to earn some pin money and the kids want to be able to earn some money over the summers. That's where they get the Honda motorcycle and the VCR and that's their pocket money during the year. So you have the parents not very enthusiastic about all-year school.

I remember when my parents used to trundle their five kids off to summer camp. There was lots of love but also a little relief when they put us five little Scheuer brats on the bus or the train. [Laughter.]

This is a very tough problem. There's obviously an urgent need in our country to extend the school year, but you've got the parents against it, the kids against it, the teachers strongly opposing it, and then you have a very powerful lobby down here—the recreation and travel industry is against it because they like that 3-month season. They don't want that to be constricted to 1 month or 6 weeks.

So you have some very powerful forces against you when you talk about a year-round school system and the very people who want it the most—that is, the underachievers in our school system who could use the stimulus in the summer and who could use the enrichment in the summer, are not at all for it.

We know from tests that kids from minority communities lose learning skills, lose reading, writing, and counting skills over the summer because they don't have an enriched educational experience. Kids from middle-income families may go to summer camp or they may go traveling with their parents or they may do a lot of reading. But kids from low-income communities, from educationally deprived families, don't have an educationally enriching experience over the summer. They urgently need it and their skills demonstrably and provably and identifiably fall off. So that when September comes they aren't hitting the deck running. They have to engage in some catchup ball to refresh and renew their skills to the point where they were the previous June.

We urgently need it, but look at the array of forces that are aligned against any effort to expand our system to a year-round basis.

Mr. SIMKIN. OK. There are two things I've got to say about that. First, it's not just the kids from you may say disadvantaged parts of the population which will benefit from more education, but also those with more advantages.

Representative SCHEUER. Of course.

Mr. SIMKIN. There's no harm done by a little more formal brainbashing, as it were.

Second, it's wonderful for all these lobbies to have their say and to influence policy to their short term economic advantage. I hope they understand that if some of these folks ever want to collect Social Security, we'd better get those productivity levels up, because if we don't the economy will not be productive enough to pay pensions when we hit the magic number.

Representative SCHEUER. All right. You make a point of the need to improve the quality of management.

Mr. SIMKIN. Yes.

Representative SCHEUER. Tell us briefly, in a nutshell, what would be the major thrust of such an effort—the improvement of management decisionmaking.

Mr. SIMKIN. Decisionmaking, education. As I suggested to you, in Japan, it's virtually unknown to see an MBA unless they are foreign trained.

Representative SCHEUER. Well, they're sending a lot of MBA's now to the Harvard Business School.

Mr. SIMKIN. Yes.

Representative SCHEUER. But they're sending their engineers for MBA's.

Mr. SIMKIN. Yes, but they start out as engineers. They start out as engineers. Over the years, the engineering profession in our country has diminished in importance. An engineer today just doesn't make the kind of money that a guy does with an MBA.

Representative SCHEUER. In Japan they produce twice the number of engineers with half our population. So in effect, on a per capital basis, they are producing four times as many.

Mr. SIMKIN. And they've got one-twentieth or one-fiftieth the number of lawyers with half our population. That's part of the problem, too.

Mr. WIGGENHORN. Somebody said that for every Toyota we buy we ought to ship them two lawyers.

Mr. SIMKIN. Yes. They have as many lawyers in Japan as the State of Ohio has, for the record. This is part of the problem, because lawyers create cost. You see, the problem, Jim, of productivity is also a problem of costs.

Representative SCHEUER. The very expensive problem of costs.

Mr. SIMKIN. Yes. We impose on ourselves costs either in terms of time or in terms of money and the result, if it's money, is that investment, therefore, is less than adequate because there's only so much in the pot.

Representative SCHEUER. And when steel companies invest in oil companies instead of renewing their productive facilities and engage in sophisticated research and development, that's a cost, too, that detracts from the capital that they invest.

Mr. SIMKIN. And that's a management issue.

Representative SCHEUER. That's a management decision. When Roger Smith, the chairman of General Motors, at a point in time when General Motors was going through agonizing problems, pays himself an annual package of salary and bonus well in excess of a million dollars, I think you've got a very flawed decisionmaking process at work.

Mr. SIMKIN. Yes.

Representative SCHEUER. That cripples the efforts of American industry to be productive.

Mr. SIMKIN. Well, it also demotivates workers.

Representative SCHEUER. You've given us a new transitive verb.

Mr. SIMKIN. What, demotivate?

Representative SCHEUER. Yes.

Mr. SIMKIN. Well, I've heard it before. I haven't invented it I'm sure.

Representative SCHEUER. Of course it does. It must leave workers very frustrated when they're being fired, when they're invited or requested to produce givebacks while the chairman of the board pays himself a multimillion dollar pay package.

Mr. SIMKIN. We're doing other things——

Representative SCHEUER. That's gross.

Mr. SIMKIN [continuing]. That destroy productivity over time. One of the patterns that I've noticed emerging here in the United States is early retirement as an effort to slim down companies. Do you know what happens when you retire large numbers of your staff, you may say, prematurely? The company loses its memory. Over time, that affects productivity. It's wonderful. When the growth curve is going up you don't need a memory. All you have to do is ride the curve and you look like a genius. The problem is that there are business cycles. And it's when the growth curve starts to turn down that you need the memory. You need that management capability, the experience, if you want.

These are management issues. These are not issues of literacy.

Representative SCHEUER. Well, you're telling us we'd better have another set of hearings.

Mr. SIMKIN. On the management problem.

Representative SCHEUER. On the implications of inadequate management to our national productivity.

Mr. SIMKIN. Yes, yes.

Representative SCHEUER. Mr. Simkin, we appreciate your visiting us, coming all this way. You certainly deserve the door prize for having come the longest distance for this hearing. We thank you very much and perhaps if we do have another set of hearings on management we will ask you back again. Thank you very much, Mr. Simkin.

There's a rollcall vote on, so we will suspend now for about 15 minutes and then we'll resume.

[A brief recess was taken.]

Representative **Scheuer**. All right. We will now proceed with the panel. I have an opening statement which I would like to put in the record. There being no objection, it is so ordered.

[The written opening statement of Representative Scheuer follows:]

OPENING STATEMENT
CONGRESSMAN JAMES H. SCHEUER
OCTOBER 29, 1987

It is a pleasure to welcome such a distinguished panel of witnesses. This is the sixth day of a most important and interesting series of hearings on Competitiveness and the Quality of the American Workforce. I have been overwhelmed by both the quality of the testimony which has been presented and the seriousness of the implications of what I have heard.

Today we will focus on training programs for those already employed.

We read in the papers and have heard repeatedly at these hearings that the skills of the available workforce is inadequate to meet the future needs of industry.

We have heard from a number of witnesses that training programs, to the extent that they exist, are generally conducted on a piece-meal basis, are not coordinated from firm to firm or from industry to industry and are funded largely on an ad hoc basis.

We have also heard that American management falls far short of the Japanese, for example, in motivating workers. We are told that the American workplace is characterized by an adversarial relationship between labor and management and that modern management principles which give workers decision-making authority and hold them accountable for results are the exception in American business.

We have heard suggestions from previous witnesses that training vouchers or Individual Training Accounts (ITA's) may be part of the solution to improving the quality and quantity of training in America. Since all of you are close observers of or participate first-hand in domestic and/or international training programs, I am most interested in your views for a prescription to cure our nation's affliction of a poorly educated, trained and managed workforce. In particular, I would like to know where the responsibility lies for training employees who are not adequately educated in the basics and who have not learned to think critically, and therefore cannot function in a high-tech workforce? What lessons can we learn from abroad? What is an appropriate role for the Federal government? And whether, from your observations, you believe that American management practices should and could be altered?

Representative SCHEUER. The witnesses for this panel are the following: Philip Power, chairman of Suburban Communications Corp., the publisher of 51 community newspapers in Michigan and Ohio, and also chairman of the Michigan Job Training Coordinating Council, as well as a member of Governor Jim Blanchard's cabinet Council on Human Investment. We are very pleased and honored to have Mr. Power's dad here today, Mr. Eugene Power. Mr. Power, just give us a wave.

Mr. POWER. He had to leave.

Representative SCHEUER. All right. Sorry about that.

Mr. William Wiggenhorn, vice president and director of Motorola's training and education program. He's been a participant in the White House Conference on Productivity and the White House Conference on Aging.

Miss Medved, we're very happy to have you. She is Director of Government Relations, as I understand, for Canadian Job Strategy.

Ms. MEDVED. If I may, actually, I'm the Director of Intergovernmental Affairs, Employment and Immigration of Canada, and Canadian Job Strategy is one division of that.

Representative SCHEUER. Very good. We're delighted to have you.

Marc Bendick, cofounder of Bendick & Egan Economic Consultants. Mr. Bendick received his Ph.D. from the University of Wisconsin and is the author of more than 5 dozen research projects in the area of unemployment, worker training, and dislocated workers.

Finally, Anthony Carnevale, the chief economist and vice president of national affairs for the American Society for Training and Development. Mr. Carnevale manages legislative and research efforts for the association which represents over 50,000 training and human resource professionals.

We are delighted to have you all. Why don't each of you take 8 to 10 minutes and talk to us informally and after you have finished I'm sure we will have some questions for you. We will start out with you, Mr. Power.

STATEMENT OF PHILIP H. POWER, CHAIRMAN, SUBURBAN COMMUNICATIONS CORP., ANN ARBOR, MI

Mr. POWER. Thank you, Mr. Chairman. I'd like to talk about two main topics. The first is to describe some policy initiatives in Michigan which may be of interest to you and to those who organized these extremely significant hearings; and second, to talk about the analytic basis which has yielded these initiatives and which may be of some considerable interest as a model for national policy.

First, to the initiatives. In Michigan, we are funding training and upgrading of some 10,000 workers who are already employed, already on the job, and are at risk. The State is spending $10 million of its own money. The reasons for this are fairly obvious.

First, demography. Eighty to 90 percent of the work force of the year 2000 are already in the work force of today. So even if we have a good time beating up on K-12 education, we have an entire generation of workers who are at-risk now and not dealing with them in terms of upgrading their skills condemns them to problems.

Workers without skills could lose jobs. Workers without literacy cannot adapt. And we are absolutely behind our international competitors in terms of dealing with this.

As we look at the Federal legislation, worker upgrading represents a huge gap in existing programs. There is no Federal money. There is relatively little Federal incentive. But in Michigan at least we consider this a fundamental issue because if we do not help people who are now at work and are at-risk, we fundamentally run the risk of condemning them to being displaced.

Why does it make sense to do so? Because upgrading workers now prevents them from being dislocated later. Preventive medicine is cheaper than treating the disease. More importantly, we think public investment encourages managers of firms to pay attention to the stock of human capital—the skills and techniques and talents that their employees have—and to represent in their minds an understanding that investing in human capital can often pay off with greater returns than investing in physical capital.

Concentrating on actual skills has led us to another initiative which we call the Michigan Employability Skills Test. We propose to test empirically people in the labor force to define their skill level and show employers that they possess a given set of skills to qualify them for quality jobs. As the Governor says, "Quality skills mean quality jobs." It's a way of linking those together.

Today a group of employers, labor leaders and public officials are in the process of seeking to define what skills base is required to hold and effectively fill a quality job, to determine whether one can test for it, and to see whether that testing can take place in a nondiscriminatory way. This is important for a couple of reasons.

First, an empirical test of skills shifts focus from process questions, such as how many years were you in school, or which documents you possess which have no meaning—a high school diploma—to the empirical issue of the results that you're trying to achieve in the system; namely, the skills.

Second, it gives Michigan employers a solid basis on which to make hiring decisions.

Third, it provides a concrete incentive for Michigan students and workers to upgrade their own skills and maybe, just maybe, it introduces some elements of market demand into a monopolistic K-12 education system.

The thinking behind this idea is of some interest because it focuses on the results we are trying to achieve, not on the programs that we fund.

We got into this mode of thinking in Michigan when we took an inventory of all the job training programs that existed in the State and we discovered that there were something like 50 different job training programs flopping around, half funded by the Feds, half funded by the State, organized in nine different State departments of government, with activities of all sorts, none coordinated, none talking with each other, all noncoherent—in other words, a system of chaos.

But nowhere in all of this could we find a useful entry in the local phone book that said "Job Training." And as we thought this through, it seemed to us that a person who wants and needs job training is confronted with a kind of a bureaucratic maze. You have a lot of stuff going on at the local level, different intake places, different assessment practices, different eligibility requirements, different kinds of training, different sorts of funding. All of this confusion is caused by governmental habit which denominates the activity in modules of programs.

In Washington, you fund programs to fight cancer. You fund programs to do this. You fund programs for that. Program thinking leads to three kinds of problems.

First, it builds and perpetuates turf because programs work through the locally responsible agency. So somebody says, "It's my program. Its my jurisdiction. It's my cash. It's my employees." And, my God, they even say, "It's my clients." We found in Michigan that turfing is a very, very serious problem.

Second, denominating activities in programs rather than desired results results in this kind of institutional incoherence that we've been talking about at the local level. I'm sure that Michigan, with its 50 different job-training programs, is no different from any other State and Michigan's confusion is no different than what you find in Ohio or in other areas where I have newspapers.

Lastly, program thinking ignores the main issue, which is what kind of results are you trying to get? If you have a swamp in your farm, the outcome that you're trying to achieve is drain the swamp. The process issue is killing alligators. So I think the whole issue ought to be one in which we attempt to define the results we're trying to get and concentrate on those, rather than define the program we are working through.

In Michigan, we are trying to think of this in a context of major restructuring of the job training system at a time when GM, Ford, and Chrysler and the entire durable goods system in Michigan in manfacturing is under great change.

The question is, How can you get significant change with very limited resources? People don't want to raise taxes. Yet, at the same time, we have a big agenda in front of us.

Confronting this problem led us to develop a kind of paradigm which has been time-tested in the business world that is rather radical in the governmental and public sector world.

First, we try to shift our thinking from talking about programs to talking about results.

Second, we redefine the range of activity to the entire field of human investment or human capital. We try to ignore the artificial barriers that seem to exist between job training and vocational education and adult education and welfare training and illiteracy. What we'are talking about is the capital skills of all our people.

Next in the step, you simply define and prioritize the kind of results you want to achieve. These results can range all the way from a job placement for an unemployed person to an improvement of certain levels of reading skills or numeracy skills. The point is to define those skills.

Representative SCHEUER. Do you tend to achieve those skills in the workplace where the person is now or are you going to bring them back into the school environment?

Mr. POWER. I don't care. It makes no difference to me.

Representative SCHEUER. Well, what's been the experience?

Mr. POWER. The empirical experience is that it's easier to do it in the workplace because there's a lot of stigma attached if you yank people out of the workplace and put them in some school. We've even seen some training in the workplace that if you moved it away from the personnel or manager's office and moved to the back of the plant, all the sudden participation rates went up. So what works is the main issue.

Representative SCHEUER. Right.

Mr. POWER. Next, measure the outcomes. Measure the outcomes. If you can't measure what you're trying to achieve, you can't manage it.

Next, define the costs associated with those outcomes so that you get a way of measuring per unit costs.

In my buisiness, we talk about hours to compose a page or labor costs to print 1,000 newspapers. When you think in terms of programs and you forget about results, you never ask how much does it cost to achieve a given unit of outcome that you've defined.

Next, simple. You pay providers only after they deliver the results. You rear-end load the payments. When we go shopping, we don't pay the store when we walk in the door for the shopping program. We pay people after they deliver the goods. Why shouldn't we do that in government?

Next, we shift money from the less-cost-effective providers to the more-cost-effective providers because we have now defined the outcome we want and we have associated costs and we can determine what it costs for us to get somewhere.

I buy newsprint at $625 a ton. If I can get the same newsprint at $500 a ton, I'm sure going to do it. Why can't government do the same?

By extension, we are ferociously indifferent to what particular agency at the local level provides which services. In Michigan, we are not interested in turf or in sole source suppliers who have local monopolies. We are not interested in dictating the process of micromanaging the workings of the system. We are interested in getting results, and I think the application of this paradigm that we're in the process of developing which we are applying to things like the Michigan Skills Educational Test began to give us a way of focusing on the big question which is, how do we make government work more effectively in the country? Thank you, Mr. Chairman.

[The prepared statement of Mr. Power follows:]

PREPARED STATEMENT OF PHILIP H. POWER

BECOMING INTERNATIONALLY COMPETITIVE: UPGRADING THE AMERICAN WORKFORCE

We have long taken comfort in this nation that our skilled workforce was a major competitive asset. In fact, it was just two decades ago when the notion that Japanese workers or Korean workers could produce even minimally sophisticated products was taken seriously by few.

Many still utter the rhetoric today, but in too many cases, it bears little resemblance to the truth. America's workers too often fall short of the mark today when measured against our major industrial competitors, such as Germany or Japan:

- As much as 20% of our workforce is functionally illiterate, compared with less than 1% in Japan.
- American students rank far below those of other industrial powers in achievement test results, especially in math and science but also in verbal areas such as vocabulary.
- American workers are ill-equipped to cope with programmable automation. "Foreign numerically controlled machine tools can be 'unlocked' since blue-collar workers can be taught to do the necessary programming, while American machine tools are 'locked' partly because blue-collar workers cannot easily be taught the necessary programming." (The Zero Sum Solution, Lester Thurow)
- Line managers lack the people management skills to maximize productivity from existing workforces. At NUMMI, Toyota has delivered an enormous productivity improvement using the same workforce that confounded GM. The difference? The skills and methods of Toyota's management.

Worker skills matter enormously in world competition. While not the only component to preserving quality jobs in the United States, human investment strategies are central to achieving international caliber quality and productivity.

I am chairman of the Michigan Job Training Coordinating Council, and serve as an unpaid advisor to Governor James Blanchard on human investment questions.

In Michigan, we're in the midst of a major economic transition, moving from traditional manufacturing methods and employment to flexible, programmable automation and the application of new technologies to manufacturing.

We're making this shift in a context in which Ford and Chrysler have already reduced employment levels and in which General Motors now is doing so dramatically. Other employers, both in manufacturing and service, are growing rapidly in Michigan -- so much so that we have gained thousands more jobs than we've lost during the last several years. Our long-term employment future is bright.

But our workers require new and upgraded skills. Those continuing to work in manufacturing must learn to use new technologies and processes to maintain employment. And those shifting from one industry to another must learn the skills required for their new careers.

Managing that transition, building toward a healthy economic future, is central to Governor Blanchard's direction of state government. As a result, we've spent a lot of time working on human investment questions in Michigan. That's led us both to policy conclusions and some moderately radical notions about how government should approach this challenge. I want to share with you our perspectives on both counts.

On a concrete policy level, the most fundamental realization we've made is how vital it is to focus on retraining and upgrading adult workers. While enormous amounts of energy and public debate are spent on reshaping K-12 education -- a worthy goal -- far less attention has been paid to the members of the existing labor force.

Demography demands that we pay attention. By most estimates, 80-90% of the workforce of the year 2000 is with us today. As a nation, we have an entire generation of workers at risk -- thousands of adults who are losing their jobs as production methods change and who lack the literacy, the basic education or the skills to adapt to new jobs. It is difficult to comprehend a more significant public policy challenge: to fail to upgrade significantly the skills of adult workers right now is to condemn our nation tomorrow to a future of poor productivity and an inability to compete with other major world powers.

As we examined the response to this challenge, we found a startling lack of comprehensive thinking or programming, resulting in huge deficits in meeting the needs in question. First, as Rep. Scheuer correctly noted in his letter of invitation, America lacks a national policy on worker education and training. Federal programs focus virtually exclusively on assisting initial entry into the workforce: for youths, for welfare recipients, for the economically disadvantaged. In the last few years, Congress has begun to commit some resources toward helping workers who lose their jobs obtain training and placement help to find new jobs, regardless of income level. But that help has been inadequate.

The greatest gap in federal policy we found was that no federal program will support or encourage the retraining of currently employed workers. The conventional argument has been: "That's up to employers or to the workers themselves. Public responsibility stops at assisting workers to enter the labor market." Our experience in Michigan leads us to strongly reject that argument. As your committee makes its recommendations, we urge you to consider the significant impact that targeted, focused public investment can make in provoking change in the quantity and quality of adult worker retraining in this nation.

In Michigan, as in a handful of other states, we have begun investing state funds in this mission. Last year, more than 10,000 workers employed at small manufacturing firms learned how to use new equipment and processes thanks to an innovative program called the Michigan Job Opportunity Bank-Upgrade. We've also provided assistance to larger employers in retraining: as Chrysler rebuilds its aging Jefferson Avenue plant in Detroit into a modern facility with state-of-the-art technology, its workers will gain the skills they need to be successful within that realigned facility under a joint company-state training program. We anticipate the greatest growth in our state job training efforts will be in retraining currently employed workers.

Why do we believe so strongly in public investment in people who already have jobs? For a couple of major reasons:

- Upgrading worker skills prevents displacement. It costs the public substantially less to support training for an employed worker than it does to move someone back into a job after they are unemployed, when you consider unemployment benefits, lost tax revenue, and job search costs. As in medicine, a vaccine immunizing against disease is a lot cheaper than treatment once the patient is ill.

o Public investment, particularly when linked with company investment, helps increase the value firms and their managements place on worker skills. Michigan has found its program to be extremely popular with employers. We effectively encourage companies to think comprehensively about their capital stock of employee skills at the same time and in the same way they think about capital investments. This is important, because one of the most effective ways to get adults to accept retraining is to make it a routine yet significant component of company activity.

Company-specific employee training and upgrading is only one part of our response to the challenge of increasing the skills of our adult workforce. We're focusing now on three other fronts, all of which have national applicability: employability skills, basic literacy, and destigmatizing adult retraining.

When Mazda came to Michigan, the company was engulfed by job applications -- more than 100,000 people applied for 3,500 jobs at its new state of the art assembly plant. Mazda tested more than 80,000 of them in deciding who to hire. Mazda found that many of those who applied didn't have even the basic skills required to qualify them for a quality job in a new plant. That experience led us to think about the concept of "employability skills" -- a broader concept of literacy than that traditionally taken.

The Michigan thinking today is: put literacy and skill levels to a marketplace test. We are in the process of defining what skills it takes to obtain and hold a job, especially the quality jobs we're all interested in preserving and nurturing in this country. We presently have a group developing those standards, overseen by a commission comprised of leaders of Michigan industry and labor. Our plan is to develop definitions and testable standards that employers validate and to then offer Michigan men and women -- as well as young people -- a test to measure their employability skills. A person who passes this test will have proven he has the skills needed to fill a quality job.

We believe this simple device will have sweeping ramifications when completed. It will shift focus off of what process a person went through (completion of a specific course or receipt of a graduation diploma, for example) and onto what skills a person possesses or needs to gain. That will highlight gaps and establish a clear path toward skill improvements.

Meanwhile, we are forging ahead with an intensive literacy upgrading effort, paralleling and building on the commendable national emphasis on adult literacy of the last year. Regardless of what job a person may want, we must offer and encourage people to take advantage of opportunities to improve their reading and computational skills.

What we've found in Michigan is that enormous resources are available to support this effort, but that they are rather scattered and incoherently deployed. They don't reflect a comprehensive plan of attack. To correct that, we are working in collaboration with IBM to develop a unique and comprehensive Michigan workplace literacy plan to enable us to maximize the results we obtain with those resources.

Finally, we are confronting a major psychological and structural challenge: destigmatizing adult retraining and making it coherently and easily available to the public at large.

As a nation, we lack a national culture of worker education or a tradition of adult worker retraining. While continuing education is acceptable and even expected in many professions, it is looked upon with fear and scorn by men and women who have bad memories of high school experiences years earlier and are terrified at the notion of sitting in classrooms filled with 19-year-olds.

This is in many ways our greatest challenge in adult retraining. Government must play an evangelical role to persuade both workers and employers that retraining is valuable and necessary to stay employed. We can establish incentives, models, and programs -- and should -- but we should also utilize the bully pulpit available to public leaders at all levels to advocate this cause. Governor Blanchard is doing exactly that in Michigan, and his example should be embraced across the nation.

A related challenge we find is that the institutional structures of adult training aren't configured in ways that are obvious, let alone "user friendly." Even if you convince people they need retraining, that may not happen if they can't find training services where they live and work.

Think about this in terms of your own community: if you look up "job training" in the phone book, what do you find? If it's like my phone book at home in Ann Arbor, the answer is nothing.

When we were developing our strategies in Michigan, we undertook an inventory of job training resources and programs at the state level. That effort uncovered no less than 50 separate state-level funding sources supporting hundreds of local job training programs. We published our findings in an excellent state directory, which is now updated annually.

Those findings led us to the concept of "user transparency" for the job training system in Michigan. To the person wanting job training, the system that assesses his needs, refers him to the right place to get the right kind of training and helps him pay for it ought to be as transparent and user friendly as possible. Confronting a person wanting training with a bureaucratic maze of differing programs, each with differing intake policies, assessment practices, eligibility requirements and outcome criteria is nothing more than a cruel government trick.

Rather than get tied up in the political and bureaucratic nightmare of trying to solve information and jurisdictional problems by creating superagencies or rearranging organization charts, we are instead moving ahead on putting into place a system that will make the range of services available in each community easy to find and access.

We plan to create a statewide label for training services, and operate local common intake, assessment programs and data bases to guide people to the assistance they want and need, regardless of which program provides the funding.

Doing these things are great challenges, but crucial to our future economic success. Without a doubt, some of the initiatives that need to emerge are expensive. And, equally clearly, they arise in an environment of limited resources. In Michigan, we're projecting flat revenues during the next several years. Nationally, the enormous magnitude of the deficit argues against major new spending.

As we thought about how to accomplish major new objectives during a time of severe resource constraints, we were forced to begin a fundamental reexamination of the way government works. We came to realize that simply managing individual public programs in isolation would fail to produce the synergies required to achieve comprehensive, effective adult worker retraining with little or no additional public money.

Our analysis produced a powerful paradigm, one we've found extremely useful in building a strategy for accomplishing our admittedly ambitious goals. It centers around taking basic business management concepts and applying them to government activities.

Our basic objective has to be to obtain a greater return on existing levels of public investments in the overall stock of human capital if we are to accomplish our goals in this environment.

The notion of return on investment is a new one for government programs. Traditionally, we have thought about government activity -- indeed, denominated government's doings in terms of programs. The very nature of government is to be organized around programs: the welfare program, the older worker training program, the bridge building program, and so on. This has two results, both bad: first, it encourages and establishes turf, and second, it ignores results.

What we are attempting to do in Michigan is to shift our thinking from programs to results; from the amount spent to the return on the investment. That means undertaking the same kind of analysis of activity that any well-managed business routinely develops.

We started by asking a series of questions that are fundamental to building a business plan. What business are we in? Who are our customers? What are the demands/needs of those customers?

By starting with those fundamental questions, we find our focus shifts to being market-driven or demand-driven instead of product-driven. The private marketplace has example after example of product-driven companies becoming so out of touch with their customers that they fail. Government is made up of lots of product-organized and program-driven enterprises. We can and should change that thinking.

Once you've defined the needs that your customers have, the next stage of analysis is to shape the product. In terms of government programs, that translates into defining outcomes that your customers want and that you are seeking to achieve, but especially defining them in such a manner that allows you to measure them. Since government's motive isn't profit but service, it is vital to quantify what you seek to accomplish with a government enterprise. It may be placement rates, grade levels of increase in reading comprehension, or any of a wide range of other options. What's important is to be clear on defining outcomes, prioritizing them, and measuring them.

The next related step is to define appropriate costs associated with achieving those outcomes, and then to measure them.

As you move to service delivery, these basic principles translate to paying for results. Providers should be paid only after outcomes are achieved. And, providers should be selected based on their cost-effectiveness at delivering the desired outcome.

It is important to then measure the results providers achieve, and to shift money from nonperforming programs to ones that can achieve the results you want in a cost-effective manner.

Our conclusion in Michigan is that we don't care who provides the service at the local level. We're not interested in turf or in sole source providers with monopolies. We're not interested in dictating process or micromanaging the workings of the local job training system. We're interested in obtaining results.

The final step in our framework is to measure the returns achieved on our various investments in human capital. We're presently building the capacity to do this major undertaking. It involves establishing common definitions across programs and agencies, establishing ROI measures, and developing an integrated management information system capable of analyzing cross-program data.

When that is in place, it will provide us with the capacity to manage government activities in a way equivalent to the bottom line test that businesses use in making investment decisions. It will provide us with the tools needed to complete our efforts to shift from program/product-driven thinking to market-based, ROI-tested business decisions about our human investments, allowing us to maximize the use of limited tax dollars available for this enterprise.

The challenges are stimulating. I believe our lessons in Michigan all have national applicability, and would urge your committee and Congress to consider them as you proceed.

Representative SCHEUER. Very good. Thank you very much. Mr. Wiggenhorn is next. I hope you will speak to us informally. The text of your remarks as you have prepared them will be printed in full at the point in the record at which you address us. So take your 8 minutes and just chat with us and don't hesitate, any of you, to refer to anything else you've heard this morning either from witnesses or from this side of the table.

STATEMENT OF A. WILLIAM WIGGENHORN, VICE PRESIDENT AND DIRECTOR, TRAINING AND EDUCATION, MOTOROLA INC.

Mr. WIGGENHORN. Thank you. I'd like to start out by referring to Arnold Simkin's testimony because I think he identified one of the real issues. That is what I would call management literacy. To me, the seriousness of this topic is really industrial literacy, and that is from the newest worker on the floor of the factory to the most senior executive. I think it is a common issue throughout the organization, not just the people in a certain sense on the floor, but in the engineering ranks and management ranks.

I have an opportunity to travel around the world at least four or five times a year, so I spend about 4 million miles a year on airplanes. I remember in the 1970's it was American businessmen who rode in first class and never really found out who was in the other sections. Today, it's all Japanese and Germans and Swiss who ride first class. Japanese wives and children and a few American businessmen in business class and senior American tourists and middle aged Japanese tourists in economy.

To me, that begins to say there is a change going on, a very simple change, but also if you try and get a cab in Seoul, Tokyo, Taiwan, or Singapore, the chances of getting an English-speaking cab driver there are far greater than in Chicago, New York, Washington, DC, and the chances of arriving at your planned destination are also far greater.

Representative SCHEUER. Amen to that.

Mr. WIGGENHORN. So I think we're slipping probably in all brackets.

I'd like to give you our experience. If you take one of our mainline factories in Chicago in a suburb called Schaumburg, we have about 7,500 people. Of the 7,500 people, roughly 3,200 or 3,300 are workers as described in the document, production workers. Of that group, we have found that 1,000 of those individuals lack basic math skills—adding, subtraction, multiplication, division; 550 cannot comprehend English; 250 do not read above the first grade level; 2,200 people cannot think, as Arnold said—do problem solving.

Now why is that an issue? Well, as you automate the facilities, one is you find out that robots and automated equipment speak English. They don't give commands in other languages. Computer terminals, of which we now have 30,000, print in English and you're expected to read it. It turns out we used to have managers who did the translation, but in slimming down the organization those managers have disappeared. So the person with the terminal now has to interact with it.

We have also found, as Arnold pointed out, that it's important to work as teams, not as we used to call individual lone rangers, the American way—we will all shoot it out ourselves. Some of our foreign-born consultants have told us that if we were as hard on our competitors as we are on each other, we would be much stronger. In other words, if we worked more as a team together to get the product out, rather than cheating between divisions, and force that on the international competitor, we would be stronger.

Now that's at one level. You move up in the professional ranks and you begin to see that in your engineering population that in software, engineers are old by the time they're 28 or 29. They might be completely obsolete by the time they are in their early thirties unless we continue to invest in their development because technology is changing so much. We have electrical engineers who simply have to be retooled——

Representative SCHEUER. Rewired.

Mr. WIGGENHORN. Rewired as software——

Representative SCHEUER. Mechanical engineers get retooled.

Mr. WIGGENHORN. We also have a few of those, a dangerous species. But the amount of time that will take is about 18 months and is relatively expensive.

Representative SCHEUER. Well, let me just ask this question. Don't these young engineers themselves read the monthly magazines, newsletters, go to occasional conferences and so forth? Doesn't that process of upgrading, of being current take place because these professionals want to stay at the cutting edge? These are professionals you're talking about. These aren't blue collar workers. Don't they do that by a whole variety of informal processes of conferences, seminars, journals, newsletters, chatting with their colleagues, reading the technical journals of all kind?

Mr. WIGGENHORN. Sir, you sound like the chief executive of major U.S. firms that I've dealt with.

Representative SCHEUER. It can't be that bad.

Mr. POWER. They believe that's what should happen.

Representative SCHEUER. You're not supposed to come here and insult the Congress.

Mr. WIGGENHORN. The answer is no. If 2 to 3 percent of the engineer's time is spent on updating, which is the traditional investment, reading trade journals, and so forth, that used to be adequate. The Federal Republic of Germany published a study not too long ago that estimated that in high-tech organizations the technologists had to spend 12 percent of their time updating themselves.

Some leading U.S. firms are estimating now about 140 hours a year of planned development is necessary to a technologist to stay up to date and the average is probably less than 40 hours a year.

Representative SCHEUER. So a month a year?

Mr. WIGGENHORN. That's right. And the other thing to put in balance is that the Taiwanese engineer is working 60 to 70 hours a week and ours are working 40 to 50. With that extra 20 hours a week it's awfully hard to pick up any kind of productivity gain and they are simply investing even more time in their development.

If you look at Japanese engineers, our major competitors in Japan invest three times the amount of money and time in updating the technical skills of their work force than the best U.S. firms.

Representative SCHEUER. That's impressive.

Mr. WIGGENHORN. If you look at executive education in this country——

Representative SCHEUER. Is this the average Japanese firm?

Mr. WIGGENHORN. The average major Japanese electronics firm.

Representative SCHEUER. You're talking about the multinationals, the Mitsuis, the Mitsubishis and——

Mr. WIGGENHORN. Yes. But what you find is that it trickles down into their supporting organizations. They do a very good job of providing the skills necessary to their supplier based employees. It's one of the things we're finding out in this country is that for us to produce what we call a six sigma product, a perfect product, we have to make sure our suppliers can give us perfect components. So one of the things we're trying to do is work with our suppliers to train their folks at cost so that they can provide us the components necessary to remain competitive.

Since the Japanese opened factories in this country, they tend to bring their own supply base with them. In fact, I have a contention that every job we create there we eliminate many more jobs of the support industry.

Representative SCHEUER. Of the suppliers?

Mr. WIGGENHORN. Of the suppliers, because we have no way to keep them educated and up to date on the skills and they need it as well as anyone in the multinationals.

At the executive level, if you look at executive education in this country—and I'll probably be crucified by 50 different business schools on this—but if you look at them, you sometimes look at them as finishing schools, but they don't teach you to do anything. You can conceptualize it, but you don't understand as an executive what it means to reduce total cycle time, which means you've got to get rid of some of the bureaucracy. It doesn't take 14 signatures to hire a clerk. You trust two people to do that, etc.

Some of the executive education—and I think it's management literacy that we're dealing with—is to teach people again how to do things because as we evaluate the midlevel and the manager and the professional and the worker, one of their comments is always, "Train my boss. I can do it. Train my boss." By the time you reach the boss, the boss always says, "Train the president." When you go see the president, it's "Train the stockholders." I don't know where it ever ends.

But there is a common thread that says we really do have to change it. I think in this country probably a shift in executive education focusing on "how to" should become very important. For instance, one way to understand how to improve quality is to understand the tools and techniques. I think we all say, yes, we should improve quality, but very few executives understand the techniques involved in improving the quality of a product or service.

Representative SCHEUER. It's interesting you should say that because we were the ones who taught the Japanese quality control a generation ago and they learned their lesson so well that they far outstripped us.

Mr. **Wiggenhorn**. Right. It's one of the things we find with Asians. They actually believe and do what we say where we will spend many dollars trying to convince ourselves that it probably is not true. Take an example, in statistical process control, which Mr. Demming and Mr. Juran——

Representative **Scheuer**. He's a saint in Japan.

Mr. **Wiggenhorn**. That's right.

Representative **Scheuer**. We don't pay any attention.

Mr. **Wiggenhorn**. In China, they sold more Demming books in 1 year than they sold here in 30.

Representative **Scheuer**. They've got a slightly bigger market.

Mr. **Wiggenhorn**. Right, but fewer English readers.

Representative **Scheuer**. Right.

Mr. **Wiggenhorn**. But one of the points was, they actually implemented. We don't.

To give you another comparison, when we teach statistical process control methods—and we teach it throughout the organization, from the executive down—it costs us over $200 per person because we have to have it in video, it has to be interactive, it has to be in books, whichever way you want it, it's got to be provided. If you were in Toyota, it costs them 47 cents per worker to teach the same skills. They would give you one book, would ask Mr. Power to read it first. He would pass it on to me and I would read it and pass it on to my associate, and then we would get together and explain it to each other and go do it. That's already at the moment of hire a tremendous disadvantage.

I think one of the things we can do is, one, suggest to executives that we invest at least as much in the update of people at all levels as we do in equipment. When we buy a piece of capital equipment, we'll tend to put away about 12 percent for servicing and maintenance on that equipment. If you buy a computer, you will budget *X* amount of dollars, usually about 122 percent of the purchase price for servicing it. When you hire a person, we tend not to budget any funds to keep that person competent.

We installed in our company in 1984 a policy which said you had to invest a minimum of 1.5 percent of your payroll on your people development. It's actually out that it's about 2.4 percent, and probably the right number for us is about 3 percent of payroll and eventually we'll get there.

In certain industries it's probably closer to 5 to 6 percent. But if you look at the national average, the data is very poor on this, my own bet is its probably around 1 percent. Thus, we're in a potential situation of throwing people away.

Representative **Scheuer**. What do the Japanese spend in comparison to that 1 percent?

Mr. **Wiggenhorn**. The Japanese divide the work force—this is my conclusion—into "smart" and "others." Now by doing that, the "smart"—and that could be somebody who pushes a broom all the way up—will get 3 times the actual dollar invested per person than we would invest in a person. However, the total dollars spent would be about 2½ to 3 percent of payroll. It's very focused where they invest it. And we tend not to do that.

Representative **Scheuer**. How do you teach what the professionals call higher order thinking? How do you teach workers to process information and solve problems and come to conclusions from the facts that they are exposed to?

You undoubtedly know that on Japanese automobile production lines, every single worker has a whistle cord and every worker on the production line can pull that cord and close down the entire production line. That means he is vested with a considerable decisionmaking power.

Mr. **Wiggenhorn**. Right.

Representative **Scheuer**. He is empowered and he has to make judgments and he has to be able to process information, what we call higher order thinking. How do they get to be smart enough so that it's economic and sensible to give every worker on a Japanese production line that power to stop the whole process if in his judgment something has happened to make that necessary?

Mr. **Wiggenhorn**. Well, almost every Japanese production worker would be reading at about the 12th grade level coming in, so he could read that book and pass it on.

Number two, they would be quite skilled in math. They would have already been used to working in teams so it's not a change of style for them. And they have been given problems to solve throughout their secondary education system.

They also probably went through, as they joined the organization, a very detailed orientation program, that in some cases lasts 2 years, before being put on the line. In other cases, it's shorter, just a couple of days, in which they are taught the culture and values and the expectations. They are then assigned mentors, people who already know the process, to work with them.

Now in the United States I've seen us do the same thing, but you have to have people at a skill level where you can delegate that. But you also have to have managers who trust people to delegate it. It's a double-edged sword. But you can't delegate that type of responsibility if people can't read, if they can't analyze the quality charts so they know when to stop the line. That's really one of the major issues here.

Representative **Scheuer**. Right. I apologize for interrupting. Please complete your statement.

Mr. **Wiggenhorn**. The last thing is to try and get management to set aside money to invest in people. I think that's one.

Number two is to look at what has worked in other nations and select from there. In some of the previous testimony the French tax credit has been mentioned. I think it has some value. I think, also, it's wasted lots of money there, but I think we can learn from that. The Swiss and German apprenticeship systems are very effective. The Common Market Social Development Fund, the Sigapore Employment Tax, the Scottish Development Fund, the Singapore Employment Tax, the Scottish Development Fund, and the State of California Employment Training Panel concept are things that I think have components that we can pick from. I'm sure there are others.

Representative **Scheuer**. We were told by another witness that in Singapore they have 14 or 15 training institutes all over the city.

Mr. **Wiggenhorn**. Right.

Representative Scheuer. To train workers and train potential employees this higher order thinking and higher order technical skills in a whole variety of different fields.

Mr. Wiggenhorn. That's right. They have $80 million of capital automated equipment in Singapore that their work force is being trained on that is the state of the art.

Representative Scheuer. Just in training institutes?

Mr. Wiggenhorn. That's right.

Representative Scheuer. That's phenomenal.

Mr. Wiggenhorn. And they are funded by the German Government, the Japanese Government and the French Government.

Representative Scheuer. In Singapore, they are funded by all of those?

Mr. Wiggenhorn. That's right.

Representative Scheuer. Why couldn't we apply for some of that foreign aid?

Mr. Wiggenhorn. I've suggested it many times. But when you go there you see their strategy is to sell in the marketplace very intelligent workers, not cheap labor. They are also all being taught in English because they see English as the technical language.

I found it very interesting when I asked them, where are the best places I can go to learn in the world, they did not give me one U.S. institution.

Representative Scheuer. Even our great engineering institution, MIT, Cal Tech, Carnegie Tech?

Mr. Wiggenhorn. I'm not going to make a judgment. They just didn't have them on their list.

[The prepared statement of Mr. Wiggenhorn follows:]

RETRAINING THE AMERICAN WORKFORCE

Prepared Statement of

A. WILLIAM WIGGENHORN

VICE PRESIDENT AND DIRECTOR
TRAINING AND EDUCATION
MOTOROLA INC.

before the
Subcommittee on Education and Health
of The Joint Economic Committee

on the

"Competitiveness and the Quality
of the American Workforce"

October 29, 1987

It is a pleasure to appear today before the distinguished members of this committee to address the topic of Retraining the Workforce - those who are employed. You have asked that I address my testimony to the issues of what skills we expect our employees to demonstrate competency in and the extent and nature of our investment in retraining.

As I know you are acutely aware, many industries, corporations, and individuals are experiencing the impact of rapid technological change and global competition.

Today's markets are vastly changing. They are becoming increasingly global and more complex, subject to changing consumer tastes, and in some cases, government deregulation and regulation. Companies are challenged to sell complex products to more sophisticated consumers in increasingly saturated markets. One implication is that the information content and skill requirements for many jobs are increasing and for other jobs, deskilling is taking place because of automation.

The introduction of new technologies in the factory and office has enormous human resource implications. Relationships are changing between management and labor as each individual (managers, professionals, laborers) need to upgrade their problem-solving skills and teamwork approaches. Change, in human resource development, is not often easily accepted, but in today's competitive global marketplace it is no longer optional - it's mandatory.

Adaptability is the primary skill the worker of today and of the future will need to possess. It is predicted by researchers (futurists) that:

- workers will change jobs five to six times during their normal work lives;
- a total of 1.5 million workers are permanently displaced each year and will require assistance to reenter the workforce; and
- by the year 2000, an estimated 5 to 15 million manufacturing jobs will require different skills, while an equal number of service jobs will become obsolete.

Public and private institutions need to react to this situation immediately. Change in our environment is accelerating so quickly new jobs will require entirely different skills. This trend will only accelerate. Business alone cannot absorb all the costs and responsibility for the development of a strong economy. Private and public institutions must react to this situation as partners. Creative partnerships among business, government, and labor are the only way we, as a nation, can confidently maintain a quality standing in the global marketplace.

Today, I would like to spend some time discussing Motorola's concerns and strategies in the development of our workforce. Specifically, I will discuss our corporate-wide objective and initiatives, our investment in training and retraining, the skills that will be needed by managers and line workers of the future, and the impact that this investment makes on each Motorola employee and outlying communities.

At Motorola, our fundamental objective is Total Customer Satisfaction. To achieve this, we have identified five key initiatives: Six Sigma Quality, Total Cycle Time Reduction, Product and Manufacturing Leadership, the Profit Improvement Program, and Cooperation and Participation. These are not new concepts, but the Corporation will continually experience renewal as we focus on their unified implementation. Constant renewal is the process we will use to make needed changes happen.

Motorola management supports that the training and education function is a vital element in this renewal process. Training becomes the critical link in the chain which connects our key initiatives. Training develops a common language which is necessary in communicating our goals to our employees, customers, and suppliers worldwide. It is in the training event where team members have the opportunity to gather together, to study new technologies, and creatively solve daily challenges.

As testimony to Motorola's commitment to developing the human resource, our Corporate Policy Committee established a benchmark in human resource development by requiring that a minimum of 1.5 percent of payroll be invested by each business in the development of their people on an annual basis. Our actual investment in 1984 through 1986, has been between 2.2 and 2.4 percent of our payroll. It is estimated that many of our divisions will have to invest 5 percent + of their payroll cost in human resource development in the future because of the extensive changes forecasted in their segment of the marketplace.

In 1986, Motorola specifically invested $44 million in training and a like amount in 1987. Most of that - over 90 percent - was invested in upgrading the skill level of existing employees. The $44 million does not include the cost of employees' salaries and benefits while training occurs - that cost is additional. Thus the total investment is over $100 million when participant salary, benefit, and lost opportunity costs are included.

This extensive investment in the continual skill development of our employees is imperative. Manpower studies show that 75 percent of those who will be working in the year 2000 are presently in the workforce. At Motorola, 45 percent of Motorola employees are under the age of 35 and 30 percent of our employees are long service employees. (Long service employees are those that have been with the Company for ten or more years.) This trend shows that for individuals to remain valuable over a period of time in any field, they have a responsibility to make a personal investment in updating their skills and knowledge.

We have identified seven key areas where the largest quantity of our people reside who must acquire new skills in a changing work environment. The areas are: finance, business unit planning, information systems, management, technical (manufacturing, engineering, software), customer and field support personnel, and sales/marketing. In addition, we realize we will have to provide skill upgrading to the employees of many of our suppliers if we are to produce the quality of product demanded in the marketplace.

Before I define retraining and give you specific examples of retraining programs within Motorola, I would like to share with you the basic skills line workers and managers need to possess in the electronics industry.

Ninety percent of the employees hired today and current employees need to be competent in the skill areas of: (1) the English language, written, and verbal; (2) problem-solving techniques; (3) statistical process control methods; (4) basic mathematics; (5) team processes; and (6) keyboard utilization as job aids. In regards to keyboard utilization, over 30,000 of our people conduct much of their work utilizing computer terminals, computer control devices, and word processing equipment and that will double in 2 to 3 years.

Training in these skill areas is facilitated by the Corporate and local training functions. Although we have found that individual training in these skill areas is productive, we have found that long-term planning yields the best return on this investment. To effectively train and retrain our workforce, our focus is not on sporadic training, but to effectively implement a long-term training plan for each individual and organizational identity.

To aid in the implementation and institutionalization of long-term development, Motorola's Corporate training department has developed training roadmap critical paths. A series of training programs are detailed in any topical development guide. For example, the Statistical Process Control Development Guide consists of 19 modules which present various statistical skills and tools. As participants progress through the modules, they consistently build expertise in a variety of technical areas.

In addition to our Statistical Process Control Development Guide, we have development guides for Engineering, Manufacturing, Sales operations and Short Cycle Manufacturing. We are currently creating a development guide for management. Just as line workers need to retain competitive skills, so do our professionals, managers, and executives. The middle manager is especially affected by the marketplace, organizational, and technological change. A shift in fundamental ways of doing business bring the middle manager into a decision-making role that requires entrepreneurial skills and knowledge.

The emerging job of the middle manager will be broader and more challenging than in the past. Middle managers need to be accountable leaders, risk takers, communicators, and change-agents. In addition to actively pursuing their own continuing education, middle managers will have to work with their employees on their development and decide at what pace a specific group will progress through their skill building.

This year the Corporate Training Department has developed a Curriculum Map around one of our key initiatives--Total Cycle Time Management. The goal of the curriculum map is to aid managers in reducing the time and improve the quality of everything their department does that affects the customer. This map details over 40 training programs and identifies what employee population should take which specific training programs.

A business unit can utilize this map to decide that specfic tools/skills direct labor employees through senior managers need to possess to become familiar and expert in total cycle time reduction. The goal of the curriculum map is to encourage our business units to see both cycle time management and training as continual processes which directly impacts our key objective of total customer satisfaction.

It is at this point where it becomes critical to discuss retraining. In speaking specifically about retraining at Motorola, we can look at retraining as either "continuing education" or "an employee acquiring entirely different skills to move into a new job in a new career path." We are actively pursuing both perspectives of retraining within Motorola. At this time, continuing education/skill updating is done on a much broader scale than the extreme career shifting of employees from one vocation to another.

Our Communiations Sector is currently developing a full-fledged retraining program for software engineers. At the present time, we have a shortage of software engineers and need to develop expertise in this subject area. The plan is to take 150 mechanical, maintenance, and electrical engineers and thoroughly retrain them in software engineering.

The program is scheduled to be implemented in 1988. Engineers will attend the program in groups of 20-25. A preliminary curriculum has been developed for this software engineering program consisting of six college level courses. The providers for the courses will be universities such as the Illinois Institute of Technological University. Courses provided by the National Technological University will enable us to utilize our satellite capabilities to receive programs from leading experts from 22 U.S. engineering universities.

It will take a minimum of six months and a maximum of eighteen months for engineers to complete this training process. The time it takes to complete the program varies due to a great effort to customize it to meet the engineers' needs. Many of the engineers have families and other personal commitments and do not have time to attend evening programs. Therefore, a majority of the educational process will occur on-the-job. This has been a major consideration in the program's design.

Motorola is currently pursuing Illinois state funding for this program and is receiving an extremely positive response from state officials. The state sees that this training will be satisfying a very important need for skill development in this technological area. State partnerships such as these are critical in ensuring our continued organizational development and the continued development of local community residents.

Another example of our many retraining efforts exists in the Semiconductor Products Sector. In one of the divisions within the sector, the training and compensation departments are working together to identify the academic and skill background necessary for mechanical engineers to become electronic and electromechanical technicians.

In listing job descriptions and requirements for these technicians, the compensation department is idenfifying what specific training courses an employee needs to take to be promoted to the next job grade. This technician matrix details programs and skill knowledge that can be acquired either internally, by a vendor, or through a community college. Although it is recommended that the employee participate in skill training for his/her own development, specific skill training is considered mandatory for advancement. These are only two key examples of how Motorola is addressing retraining in competitive technical positions.

A strong commitment to retraining employess also exists in corporations such as Hewlett-Packard, Kodak, General Dynamics, and Bell operating companies. The American Society for Training and Development testifies:

- the investment in company-sponsored education and training is on the same order as U.S. expenditures on higher education,

- corporate education and training is the largest system of adult education in the U.S.,

- about 70 percent of retraining of U.S. workers takes place in corporate education and training programs,

- and at least 20 major U.S. corporations now offer accredited college degree programs.

Although this interest and investment in human resource development is growing, there are still many companies which continue to view training as a routine activity. Management does not always place a high priority on individual development, because it is not always conncted to the corporation's broader strategic interests. It is especially difficult for mid to small size firms to make a substantial investment in human resource planning. The funds or staff are often just not available.

No single organization, state government, or university can address future retraining issues alone. Sporadic commitments throughout the nation will not make the impact that's needed. It is imperative that creative partnerships are formed between business, federal, state, and local leaders to develop creative ties between government, business, labor, education, and the media.

Retraining can be: pro-active, a viable alternative to layoffs and new hires, a reallocation or reprioritization of existing dollars and new dollars, a step in optimizing financial and human resources in pursuit of business goals, and a recognition of the value of keeping productive and motivated employees.

Through your continued support, decision makers will continually gain exposure to this critical topic and be informed on ways they can affect change in our changing marketplace. Thank you.

Representative SCHEUER. Well, thank you very, very much, Mr. Wiggenhorn. We will now suspend for about 4 minutes.

[A brief recess was taken.]

Representative SCHEUER. We will now hear from Donna Medved, who is Director of Intergovernmental Affairs and External Liaison for the Canadian Jobs Strategy. Is that institution an arm of the government?

Ms. MEDVED. Actually, I'm the Director of Intergovernmental Affairs for the Department of Employment and Immigration, Canada. The Canadian Job Strategy is the main thrust of our training arm.

Representative SCHEUER. Excellent. OK. Why don't you chat with us informally for about 8 minutes. Your prepared statement will be printed in full in the record. Please proceed.

STATEMENT OF DONNA MEDVED, DIRECTOR, INTERGOVERNMENTAL AFFAIRS AND EXTERNAL LIAISON, DEPARTMENT OF EMPLOYMENT AND IMMIGRATION, CANADA

Ms. MEDVED. Thank you, Mr. Chairman. I'm going to go about my speaking differently than my colleagues because I basically want to report to you what we do in Canada in the area of human resource development and training and retraining of workers, and so forth.

I think just for terms of reference, everybody should remember that Canada is a huge country. It's the second largest in size in the world but we have one-tenth the population that the United States has and if I were to use any figures, then I think to have them relevant in this context they would have to be multiplied by 100.

The Employment and Immigration Department in Canada is the Federal arm for training. We have a number of other functions as well. In Canada, it's recognized that training of adults is a Federal responsibility. I wish it were as neat to say that all training is run by Federal programs because we run into problems in that education is a provincial mandate and in trying to make the definition between education and training and where one starts and one leaves can run into jurisdictional dispute, but basically the training programs are Federal programs.

Also, our department is Federal in a true sense of the word, meaning that when as a department, if we're running a Federal training program, it is for the entire country.

Employment and Immigration in Canada has 28,000 employees who are seated at headquarters in Ottawa; they are regionally seated in areas that are comparable to our provincial jurisdictional boundaries and they are locally seated. Any program that is developed or delivered through Employment and Immigration is delivered at the macro and micro level by that same Department.

We have a number of functions, as I mentioned. One is unemployment insurance, which is basically what it sounds like, and that is to provide income support to people who are unemployed. The reason I reference it now in terms of training is because a component of that program is to provide training projects where people are basically workers and will make an income as a worker under unemployment insurance while they are receiving training to reenter the labor force as retrained personnel.

The Canadian Jobs Strategy, and the person who I'm replacing is a director of the Canadian Jobs Strategy, is the arm of our Department for training. We have six program elements within that. Three of them are more for training workers to enter the workplace; three of them have elements which allow for retraining of current workers. These are, by name, skills investments, skills shortages, and community futures. Each one has a different approach.

There can be retraining on a technical level. There can be retraining or what we call redressment training, and I believe that you would call this industrial training. There can be training within public institutions—community colleges, for example. There's training projects that are specifically for that. So we approach it in a number of different ways—through institutions, through the workplace, or through special projects that are established particularly for special type of training.

The community futures program which I mentioned is a more broad-based program which works with the community. If an entire area is threatened because maybe it's a single industry town or by whatever difficulty in a particular industrial sector, then we could support groups and small entrepreneurial developments within that area as well as retraining.

I think that one program that my department operates that may be more familiar here is the industrial adjustment service. This program is basically for areas where there is a threat of layoff and the Government of Canada, in concert with the provincial governments and the private sector, would set up boards that would identify the requirements in order to save the industry from a major or total layoff, and part of what they may identify in that case is retraining of their employees in order to maintain that industry.

Also, a few other services within the Department are employment related. One of our major functions is placement services and matching the client with the employer—not that the employer is not also a client in this sense but I'm just talking about more than industrial adjustment services.

In this area we have what was previously known as the Canadian Classification and Dictionary of Occupations. The reason I bring it up is because we used to identify occupations by the type of work that's done. This is now being reworked in order to classify jobs by the type of skills required, recognizing that for any job and any training that has to be done, the requirement of skills is to identify that which is transferable, not necessarily that which is just to that particular type of work.

I would conclude my comments with saying that I have brought some literature for the committee that gives general information on what our programs can and cannot do and I have figures on our expenditures, and so forth.

[The prepared statement of Ms. Medved follows:]

PREPARED STATEMENT OF DONNA MEDVED

"MAINTAINING A COMPETITIVE WORKFORCE THE CANADIAN EXPERIENCE"

One of the biggest challenges facing government is the establishment of measures that assist workers and employers alike to adjust to an ever-changing Labour Market.

Governments are expected to intervene to alter effects of change and also foresee change; and plan to ensure it is beneficial to employees and employers.

At Employment and Immigration Canada (EIC), our employment mission is:

To develop and apply policies and programs for the Canadian Labour Market to bring about improved efficiency and equitability.

Before addressing the particulars of Employment and Immigration Canada as they relate to the topic at hand; first note a few facts about Canada and this Department, generally.

Canada is essentially a country of primary producers, but even primary industries must adapt to new technologies to be competitive or they will disappear.

Canada is huge geographically. Our population is one tenth the size of the U.S. population. You may wish to multiply the figures I provide later by 10 for your context.

Our industrial base is regionally fragmented and diverse. The vastness of Canada has created hundreds of Local Labour Markets, where the economy is based on all levels of activity, from fishing in Atlantic Canada to companies at the leading edge of technology in what we call Silicon Valley North in Ottawa, Ontario.

The goal of Employment and Immigration Canada is to make a difference in this diverse Labour Market... To make things happen that would not happen without us. Because resources are limited, we concentrate our efforts on serving those most in need -- small businesses; industries in trouble, communities having severe adjustment problems, the long-term unemployed, the groups designated under federal legislation entitled the Employment Equity Act - Youth; Women; Disabled and Visible Minorities.

We are a national department in the truest sense. With headquarters in Ottawa, we have 10 regional offices which match the boundaries of the provinces but include the 2 territories. We have almost 500 local offices - called Canada Employment Centres across Canada. In addition, we provide itinerant services to remote or isolated communities and have additional employment centres on campuses and elsewhere to serve students and youth.

Our department has over 28,000 employees, we have a series of integrated services, a continuum of measures designed to help workers and employers make the adjustments necessary to create a successfully functioning Labour Market including training, retraining and industrial adjustment.

Our integrated approach has three main components:

- Unemployment Insurance.
- Employment Services.
- The Canadian Jobs Strategy

UNEMPLOYMENT INSURANCE was introduced in 1940. It was designed to play a transitional role. The basic purpose was, and is to provide an income replacement for a specific period between spells of work, or between the end of employment and withdrawal from the Labour Force.

It is adaptive and preventative because it helps individuals who are between jobs to weather a difficult period in their lives, and to adjust back into the Labour Force.

The National Unemployment Insurance program is financed for the most part through contributions from employer and employee premiums. Contributions also come directly from the federal government (97 per cent of paid workers are insured under the program).

In 1986, employee and employer premiums amounted to over $9,61 billion. Government contributions in 1986 totalled almost $3 billion.

Benefits are paid during a benefit period generally of up to 50 weeks after a two-week waiting period has been served. The benefit rate is 60% of insurable earnings to a maximum of $318 per week (1987).

The National Unemployment Insurance program involves 8,000 employees. Unemployment Insurance benefits totalled $10,514 million (gross) in 1986. In 1986, over 3 million claimants received benefits.

In addition to functioning as an insurance for workers leaving employment for a variety of reasons, the National Unemployment Insurance Program is being used creatively to help workers retain employment. Sickness benefits and maternity benefits are used to help individuals take the required break from a job without having to give up their jobs permanently. Through this adjustment measure, employers retain skilled workers and workers keep their jobs.

Initiatives funded through the Unemployment Insurance Program help workers keep or regain employment.

For training - Section 39 of the Unemployment Insurance Act provides benefits to Unemployment Insurance recipients who undertake full-time training in courses approved by Employment and Immigration Canada.

Benefits are paid at the regular rate. If claimants qualify for a training allowance, they can receive the training allowance rate, or their Unemployment Insurance benefit, whichever is greater.

Training benefits in 1986 amounted to $237 million. The number of U.I. claimant trainees was 83,600 in 1986.

In the way of job creation and training - Section 38 program is unique. It enable Unemployment Insurance recipients to voluntarily maintain their skills, be payable occupied and continue to search for employment.

Unemployment Insurance benefits are provided to participants in approved training projects. The employer in charge of the projects can top up the benefits so that workers are paid at the going rate for the type of work undertaken.

Job Creation benefits in 1986 amounted to $96 million. In 1986, a total of 28,000 claimants qualified to work on U.I./Job Creation projects.

Work-sharing is considered to be a favourable alternative to layoffs in the face of temporary downturns and is popular with employers and employees.

Work-sharing benefits in 1986 were $22 milion. In 1986, 30,000 claimants qualified for work-sharing.

The current compensated work-sharing arrangement, under Section 37 of the Unemployment Insurance Act, was introduced in January 1982. It permits Unemployment Insurance benefits to be paid when the work week has been reduced in order to prevent layoffs.

A recent study conducted for Employment and Immigration Canada indicated that 94 per cent of participating employees where satisfied with the program and 81 per cent of participating employers also responded positively.

An investment in Human Resource and Employment Development is integral to the EIC approach.

To deal with Labour Market problems compounded by the different needs of local Labour Markets, global, centrally located approach to intervention would not be effective. The current federal government has therefore taken a new approach whereby different measures can be applied at the local level and more importantly administered at the local level.

The Employment Service has two primary clients - Employers and Workers. Working closely with our social and economic partners, Employment and Immigration Canada serves its clientele by providing services in three Labour Market Areas:

1) Information
2) Exchange
3) Adjustment

- Labour Market Information, provides the necessary intelligence on which to base decisions; for example

  COPS - The Canadian Occupational Projection System - analyses current, and projects future, Labour Market conditions by projecting detailed requirements in 60 industrial sectors. COPS has become a vital tool in human resource development.

CCDO/NOCS - In an area more relevant to training the employed worker, EIC is once again leaders in creating a classification for training - a preemptive work, Canadian Classification and Dictionary of Occupations (CCDO), which classified jobs by type of work, will be replaced by one based on similar and transferrable skills to be called the National Occupational Classification System (NOCS).

Labour Market Exchange - helps employers find the skilled workers they need.

It is the service through which employers can identify and employ the skilled workers they need. For example: Last year, through our local Canada Employment Centre network, we referred more than three million clients for employment. With respect to Public Service Recruitment, in 1986-87, 59,000 regular job vacancies were listed with Canada Employment Centres; about 56,000 appointments were made.

Industrial Adjustment Service (IAS) - is designed to help individual companies, specific industrial sectors or an entire community adjust to economic, technological and other changes. It encourages human resource planning by the Private Sector and helps enterprises and individuals adjust to changing labour market conditions.

It does this by facilitating formal agreements among employers, Employment and Immigration Canada and workers (as well as, in some cases, provinces or municipalities) to address co-operative change.

At Employment and Immigration Canada, we have received very positive feedback on the Industrial Adjustment Service. In fact, the United States Department of Labour has borrowed elements of our program.

Under IAS, financial assistance covers allowable expenses related to the work of a Joint Labour/Management Committee. These committees may identify retraining, retooling or other priorities.

The Industrial Adjustment Service lends itself to the federal government's promotion of the integration of various programs and services in support of private sector initiatives to solve training and adjustment problems.

Last year, over 500 new Industrial Adjustment Service agreements were signed in all regions of Canada at a cost of approximately $7.4 million. These agreements assisted over 300 thousand workers.

Human Resource Planning - is also an essential element in our work with the private sector as well as other federal departments and agencies. Employment and Immigration Canada is active in negotiating and implementing federal-provincial/territorial economic and regional development agreements and related subsidiary agreements as a means of encouraging human resource planning and labour market training and adjustment.

Canadian Jobs Strategy

Along with the services provided by Employment Services, Employment and Immigration Canada provides an integrated set of programs which could be used in combinations to meet the differing needs of our clients. These programming elements are entitled the Canadian Jobs Strategy (CJS).

The budget for the Canadian Jobs Strategy in 1987-88 is nearly $1.8 billion.

The following first provides some reference points on CJS and then addresses in particular 3 of the CJS elements as they relate to training of the employed worker, the theme for this Hearing.

The Canadian Jobs Strategy was inaugurated in September 1985. It marked a departure from previous programs in that it focuses on both the individual (i.e. - on the training and experience each person needs either to keep a job or land one) and on the employers who can provide the developmental opportunities.

An extensive round of consultations with all sectors of the economy was held prior to initiating the Canadian Jobs Strategy. A common basis of understanding among all economic partners - federal and provincial governments as well as the private sector and non-governmental organizations - remains an essential part of CJS.

Perhaps more than any of our other employment programs and services, the Canadian Jobs Strategy exemplifies our commitment to assist those most in need.

Each of the initiatives in the Strategy offers employers opportunities for specific involvement in creating training and work opportunities for Canadians. There are six elements of the CJS:

Job Development offers on- and off-the-job training and work experience to the long-term unemployed. The long-term unemployed are notionally definde as having been unemployed for 24 of the previous 30 weeks. 186,900 people were assisted in 1986-87 at a federal cost of $834.2 million.

Job Entry helps youth and women move from school or home to employment. Women and Youth entering or re-entering the Labour Market were assisted under the Job Entry program in 1986-87 at a federal cost of $228.3 million. 57,600 participants benefitted. For youth this is in addition to student summer programming which assisted 80,200 students at a cost of $117.6 million in the reference year.

Skill Investment helps workers avoid lay-off or job displacement due to technological or market changes. In fiscal year 1986-87, 17,800 workers received training under Skill Investment at a federal cost of $48.8 million.

Skill Shortages gives financial assistance to employers who need help in training workers in occupations where there are insufficient skilled workers. (Relocation assistance can also be provided). In 1986-87, $185 million was spent to help 70,900 workers.

Community Futures provides support for small business development, entrepreneurship, training and relocation to help those communities most in need outside metropolitan areas.

Each of these elements have their place in creating and maintaining a competitive workforce.

In terms of retraining those employed in further detail regarding several of these initiatives:

Skill Investment

- Assisting the employed to upgrade their skills
- Full-time or part-time training or retraining to adjust to technology or market changes

Skill Shortages

- Training for existing or predected shortages
- Employees, even those self-employed
- Relocation

Community Futures

- Helping threatened workers and communities

Through Unemployment Insurance, Employment Services and the Canadian Jobs Strategy we at Employment and Immigration Canada are providing an integrated service to both workers and employees, to help them adjust to an ever - changing Labour Market.

Canada had one of the highest levels of Job Creation of all OECD countries last year.

During the 1986-87 fiscal year, employment grew at a rate of 1.3 per cent.

The unemployment rate fell to 9.6 per cent for 1986-87 from 10.2 per cent in the previous fiscal year. Statistics Canada reported that the Canadian unemployment rate in September 1987 was 8.6 per cent, the lowest since January 1982.

In conclusion, Canada is doing well relative to many countries and through its many programs and services, Employment and Immigration Canada is contributing to the health of the Canadian Labour Market and its ability to adjust to changes. Through an integrated approach, training of new workers and training of the employed is assisting in the growth of employment and the lowering of unemployment rates.

Representative SCHEUER. Thank you very, very much, Ms. Medved. We appreciate your testimony. Now we will hear from Mr. Bendick.

STATEMENT OF MARC BENDICK, JR., BENDICK & EGAN ECONOMIC CONSULTANTS, INC., WASHINGTON, DC

Mr. BENDICK. Thank you, Mr. Chairman. When I first came to Washington more than a decade ago, my secretary's name was Mildred. Ten years later, her job title is still that of secretary, but in the interval the skill content of her job has shifted from typewriting to word processing. That change was accomplished by sending Mildred to school for 3 days, and that was followed by much on-the-job trial and error in the course of daily work. The transition occurred when her employer decided to invest in word processing machines. And her name is still Mildred; that is, an employed person was reskilled rather than replaced.

This homey example illustrates why policy proposals such as individual training accounts are completely off the mark in terms of modernizing the currently employed work force. They assume an unemployed worker, a major reskilling, and a classroom approach.

In contrast, the typical characteristics of the modernization or upgrading process are that it is incremental, with a very few skills being added on to a larger stock of skills that the employee already possesses. It is quite narrow. It is quite machine specific. It occurs primarily on the job and through an informal process, rather than by extended periods in a classroom.

And it is largely timed and controlled by employers. If employers do not take the lead responsibility, employee reskilling simply doesn't take place. That generalization, of course, varies somewhat between white collar and blue collar workers, as you asked about earlier. However, the key element in the updating is that it is linked to what you can actually implement on the job. If I'm an engineer and I learn about the latest updated electronic equipment by going to a conference or sending myself to school, that does me no good unless my employer has agreed to buy that new equipment. So there's an inevitable link between the work and the retraining that the worker cannot overcome.

Representative SCHEUER. You mean between training and retraining on the one hand, and capital investment and new equipment on the other hand?

Mr. BENDICK. Yes. Capital investment, the control of the work process, the design of products and so forth—the whole set of things that management controls.

Given that employers have such an inevitable lead role in worker reskilling, it's perhaps fortunate that employers are also the major beneficiary of the enhanced productivity which flows from the retraining. And in recognition of that flow of benefits, American employers do in aggregate invest very, very large sums in worker reskilling. Mr. Carnevale may repeat for us this morning some of the numbers put together by the American Society for Training and Development, which talk about $30 billion or more in annual expenditures. Model companies, such as Motorola, also spend impressive amounts—2, 3, 4 or more percent of their payroll.

But even among major American corporations, which tend to spend more than the average for the American economy, training expenditures average less than 1 percent of payroll. And very many employers in the economy—perhaps half, by some estimates—are simply spending virtually nothing at all.

So there is a depressed level of expenditure, relative to need, that extends across the economy. More seriously, there are various subsectors within the economy where that underinvestment is particularly visible. In my prepared statement, I single out four areas in particular for attention—training by smaller firms, training of lower skilled workers, training in industries which are historically now knowledge-intensive (prominently including major manufacturing) and training in transferable skills.

Representative SCHEUER. How about services? Are they knowledge-intensive?

Mr. BENDICK. There's a great variation within them.

Representative SCHEUER. Serving up hamburgers at Wendy's or Burger King's or McDonald's or washing dishes?

Mr. BENDICK. The services sector ranges all the way from brain surgeons to hamburger flippers, and so there's great variation within it. But the part of it which is not knowledge-intensive—has generally low skills among its workers—is also not very training oriented.

It is interesting to compare numbers, by the way, such as 1 percent of the payroll for investment in productivity enhancing training, against other sorts of percentage loads on the payroll, such as payments for health insurance, payments for retirement and so forth, which amount to many percentage points of the payroll. We seem to be willing to expend very generously for things which are consumption oriented and very reluctant to expend for things which are productivity enhancing.

Representative SCHEUER. Give us an example of the kind of things that we're willing to spend for that are consumption oriented.

Mr. BENDICK. Well, at a minimum, consider that every employer must make a 7.5 percent of payroll contribution to social security toward the worker's retirement. Health insurance might run 5 percent of payroll, and so forth.

Given that employers have the lead responsibility, as I've argued, for worker reskilling, what might be done to induce them to invest more?

In France, parallel problems are addressed by a payroll tax system with an offsetting tax credit. By law, each employer of 10 or more employees has what is called an obligation to spend. That obligation amounts to 1.6 percent of total wages. If the employer fails to spend 1.6 percent of total wages——

Representative SCHEUER. In what?

Mr. BENDICK. On worker training——

Representative SCHEUER. That's what I wanted to hear.

Mr. BENDICK. Then the shortfall in expenditures gets sent to the National Government as a payroll tax. But the intent is not to collect the tax. This is not a revenue-raising device, and the Government goes to great lengths to give technical assistance to help firms to avoid paying the tax by doing the training. The whole objective is to get individual companies to expend on training for their employees.

In that objective apparently the system has accomplished quite a bit. Since the law was passed in 1971, there have been substantial increases in the levels of firm expenditures for training and, most importantly, very large amounts of these increases have occurred in the very shortfall areas—such as small firms and low-skill industries, nonknowledge-intensive industries—which I referred to a few minutes ago as being of particular concern.

Other shortfall areas, such as transferable skills and the lower skill workers are more difficult to convince firms to work on, but can be done through appropriate definitions of what's allowable expenditures.

It is noteworthy that while this French tax credit system uses the power of government to induce employers to train more, it has very carefully kept government out of the training business per se. Employers control who, when, and for what to train. That keeps decisionmaking generally decentralized, flexible, and productivity oriented.

For that combination of private efficiency and public problem solving, I would recommend the French tax credit approach as a model for examination for application in the United States.

Employers in California have endorsed this general approach by accepting a training tax of one-tenth of 1 percent of their wages in place of a part of their unemployment insurance payments—and they did that even without the offsetting tax credit feature, which I believe is so essential.

Employers and workers in the automobile industry have pioneered the same idea by self-imposing a tax on themselves of a nickel for each worker hour.

Representative SCHEUER. Excuse me. In France, that program went down to firms of how small a size?

Mr. BENDICK. Ten employees.

Representative SCHEUER. Ten employees or more?

Mr. BENDICK. And in fact there's been active discussion of extending it down to firms even smaller, and that was with the support of the association of small firms.

Representative SCHEUER. Terrific.

Mr. BENDICK. That concludes my comments.

[The joint prepared statement of Mr. Bendick and Ms. Egan follows:]

JOINT PREPARED STATEMENT OF MARC BENDICK, JR., AND MARY LOU EGAN

PROMOTING EMPLOYER-PROVIDED WORKER RESKILLING:

LESSONS FROM A TAX CREDIT SYSTEM IN FRANCE

Mr. Chairman and Members of the Committee:

I appreciate this opportunity to participate in today's hearings on "Retraining the Work force--Those Who are Employed." I am Dr. Marc Bendick, Jr., a labor economist, and I am speaking jointly for myself and my colleague, Dr. Mary Lou Egan. The research on which our testimony is based was partially supported by the German Marshall Fund of the United States, although only we are responsible for its findings and conclusions.

We have been asked to discuss a tax credit system utilized in France to encourage employers to train their current work force. The principal points of our testimony can be summarized as follows:

1. To keep the American economy internationally competitive, it is important that the employed workforce be constantly reskilled. This is a primary mechanism by which labor force modernization and productivity improvements are obtained.

2. There are important constraints on the extent to which employed workers, particularly outside the ranks of managerial and professional workers, invest in their own reskilling. If the skills of the currently-employed workforce are to be continually updated, employers will have to carry a significant part of the responsibility.

3. There is a great deal of variation among employers in the extent to which they currently invest in retraining their employees. While some companies do a great deal, important shortfalls occur in smaller firms, for blue-collar workers, for transferable skills, and in industries which are traditionally not knowledge-intensive.

4. In general, there is no shortage of institutions able and eager to provide retraining services, if someone is willing pay. That is, the problem is one of the demand for training, not the supply.

5. To increase employer demand for worker training, the French impose on employers a payroll tax, set at a small percent of a firm's total wage bill, and then credit firms' own expenditures on training against this tax liability. This system seems to have increased the amount of worker training, particularly among firms previously providing the least.

6. Appropriately adapted to the American context, a similar system could usefully be implemented in the United States.

We will now develop each of these points in turn.

The Reskilling of Currently-Employed Workers is Important to American Economic Strength

When structural change occurs in the American economy, its most obvious impact on the American workforce is plant closings and mass layoffs. But these highly stressful pockets of dislocation--and the personal and community crises they represent--are more visible than they are typical. The primary arena in which the American labor force struggles with economic change is not the unemployment line but the shop or office floor. The phenomenon I will discuss today is not how some 300,000 to 500,000 midcareer workers lose their jobs each year to economic change.[4] Rather, it is how the remainder of the 117 million members of the American labor force evolve within their jobs to accommodate to change without such dramatic losses.

Sources of Need for Reskilling

Three sources generate the majority of instances in which currently-employed worker needs to acquire new job skills.

Technological Change. One obvious source of need is the steady and accelerating pace of technological change. For workers and their families, the long-run results of new technology are better working conditions, new products, and improved standards of living. For firms, technological change increases labor productivity, stimulates sluggish markets, and present opportunities to acquire and maintain market shares.[2] However, for workers and employers alike, the downside of technological change is occupational obsolescence.

Although striking examples of extremely rapid technological change do occur,[3] in general the pace of skill obsolescence through technological change in the economy as a whole is steady but moderate. According to one study, over a recent five year period about ten percent of the labor force underwent one or more changes in machine technology which altered their work significantly. This corresponds to about two million workers each year--not a small number. However, it is less than two percent of the work force each year. The number is not even as large as the twelve percent of the labor force over the five years which, according to the same study, experienced a machine change as a result of a job change not associated with new technology.[4] This moderate pace is confirmed by other research which estimates that implementations of robots in manufacturing production only displaces about one percent of manufacturing workers each year even in industries--such as automobile manufacturing--where the technology is most applicable.[5]

In short, throughout the economy, technological change does not destroy overnight the stock of skills held by midcareer workers. However, it does maintain a steady drumbeat of change, and, consequently, a steady requirement for reskilling.

Role Change Within an Occupation. It is rare that a worker remains in one job for an entire career and therefore requires reskilling only to keep up with changing technology. A second impetus to reskilling is changes in the roles which one individual occupies over a working lifetime. Even employees following one career track typically find their work activities--and, correspondingly, skill requirements--constantly evolving as they are promoted or move laterally.

The extent of career mobility varies greatly among industries and occupations.[6] The general trend in the occupational composition of the economy is away from occupations in which on-the-job experience is sufficient to provide all skills required for efficient work and toward more formal training requirements imposed prior to hiring. But at the same time, changes in rules and procedures for the operation of firms and unions have altered the way firms can hire and promote workers, increasing the role of internal upward mobility.[7] Most importantly in this connection, equal opportunity and affirmative action programs have opened areas of employment to members of minority groups and to women whose previous career aspirations had been limited by barriers beyond their control. Thus, when advancement opportunities have opened to them in midcareer, they have often lacked the skills traditionally required for the jobs, and midcareer retraining has been called in to fill the gaps.

Bottlenecks in Expanding Occupations. A third impetus to midcareer reskilling arises from changes in the mix of industries and occupations which comprise the overall economy. For example, in 1950, about 36 percent of the labor force was classified as "white collar"; by 1978, that figure had risen to fifty percent.[8] From an employer's point of view, shortages in the availability of workers with the new occupational skills can drive up production costs, as well as inhibit the expansion of firms and industries.

The most powerful tool which the economy possesses to accommodate the changing occupational composition of employment is differences between the occupations which new workers enter as they join the labor force and the occupations older workers leave when they retire. But adjustment mechanisms utilizing natural attrition and inter-generational differences may be too gradual to accommodate all changes typical of a modern industrial economy.[9] Some occupations have such high growth rates that not all openings can be filled by new entrants into the labor force.[10] At the same time, demographic trends in the remainder of this century are generating a rapid deceleration of number of new workers entering the American labor force each year.[11] In these circumstances, reskilling to move midcareer workers from one occupation to another becomes a way to meet skill shortages.

Such retreading in fact takes place on a large scale. It has been estimated that, at any one time, more than 25 million American workers--nearly one quarter of the entire American work force--is at least contemplating a career change. And such thoughts get translated into actions. Over a five year period, about 30 percent of all workers change occupations.[12]

The Incremental Nature of Employee Reskilling

Faced with such sources of demand for reskilling, both employees and their employers do invest in a great deal of skill development among workers currently employed. But the process by which they do so is often a subtle, evolutionary one.

One example of how this process typically occurs--one familiar even here on Capitol Hill--is provided by the advent of word processing technology. Over the past decade, a large proportion of document production in American offices has shifted from typewriters to word processing machines.[13] In the process of doing so, there has been no laying off of hundreds of thousands of secretaries, to be replaced by hundreds of thousands of different persons called word processors. Rather, the typical process has involved sending current secretarial employees to training programs for very brief periods (usually one week or less), after which the workers gradually mastered the new machines through weeks or months of on-the-job trial and error. In many cases, the title of the job involved--secretary--did not even change; what changed was the skill content which the job title of secretary was assumed to represent.

A second example is provided by the emergence of a new occupation in the manufacturing sector--that of robotics maintenance technician. In anticipation of explosively-growing demand for these workers in automobile production plants, several community colleges in the Detroit area have created new two-year training programs in robotics operations and maintenance, aimed at pre-career students and at the unemployed. These innovative efforts undoubtedly will prove valuable in the long run. But in the short run, they have experienced difficulty placing their graduates. The reason is that as the automobile manufacturers have installed robots in their plants, the companies (and their unions) have selected high-seniority electricians and millwrights already at work in the plants, sent them for brief training programs offered by the manufacturers of the new equipment, and thereby obtained the new work force required with neither displacement nor hiring. Despite the new occupational title, many positions as robotics technicians are little different in content or skills requirements from more traditional machine operators/maintainers.[14]

Three important characteristics of the reskilling process can be generalized from these illustrations. One is the incremental nature of the change: "New" jobs and new occupations typically are primarily "old" occupations with a few new skills added; they evolve incrementally out of existing jobs and occupations. The second is the limited role for formal classroom training in the reskilling process and the important role of on-the-job "learning by doing."[15] And the third is how low-key and invisible is the process: The skills of the work force may evolve without dramatic changes in personnel or occupational titles; indeed, in some cases reskilling may occur without the effort's being explicitly distinguished from ongoing work activities.

Is Reskilling the Responsibility of Employers or Employees?

However undramatic it may be, this process of reskilling may pay substantial dividends, not only for the nation as a whole but also for the employers and employees directly involved. Who is--and who should be--responsible for providing this important activity?

To some extent, of course, workers take it upon themselves to invest in their own skill development. When a high school graduate goes on to college, or when an employee accepts a position for low pay but good experience, that is precisely what is being undertaken. But the reskilling process for currently-employed workers offers only relatively limited opportunities for workers to exercise that sort of personal initiative. As we have seen, reskilling is often closely related to the worker's current job assignment, tied to specific pieces of equipment provided by employers, and integrated into employer-structured work activities. In most circumstances, the cooperation--indeed, the initiative--of employers is prerequisite to reskilling.

Closely related to this point is the question of who--workers or employers--is the primary beneficiary of reskilling. A fundamental principle of economists analysis of worker training is that the enhanced productivity which flows from that training accrues to the worker if the training is transferable to a wide variety of work situations; in contrast, if the training is highly specific to a particular working situation and is not productivity-enhancing in a broad range of work situations, then the benefits accrue to employers.[16] Most reskilling of current employees as we have described it is of the latter variety than the former. The necessity of employers taking primary responsibility for reskilling is consistent with this division of the benefits.

A third consideration yet again us back to employers as the lead actor in reskilling--the question of deciding what skills should be developed to meet emerging employment requirements. Forecasting future demands for workers and skills is a very difficult task. At various times and in various ways, the United States has placed this responsibility in the hands of employers, educational institutions, government training programs, government research agencies, and workers themselves. While none of these approaches has a perfect track record, the general consensus is that employers are among the more successful practitioners of the art, particularly when dealing with specific occupations and short time frames.[17] Once again employers logically assume a leading role in the reskilling process.

In short, whether we consider the role of controller, beneficiary, or planner, employers prominently occupy the role. While specific circumstances may arise in which workers can effectively invest in their own reskilling, the general rule seems to be: Either employers will take responsibility for reskilling, or the job will not get done.

Some Employers Train a Great Deal, Others Very Little

At least partially in response to this circumstance, employer-provided worker training is in fact big business. It is second only to the official elementary, secondary, and post-secondary educational system as a source of formal instruction in the nation.[18] Exemplary companies spending lavishly on worker development are often cited with pride by industrial leaders.[19] And national spending amounts to impressive totals. Estimates of annual expenditure on formal training in industry range from about $10 billion to $30 billion or more.[20] One prominent estimate is that about fifty million employees receive training each year, at an average cost of about $700 per employee, yielding $35 billion in training costs (not including wages and salaries of trainees).[21] Another estimate concluded that employers in 1981 trained one out of eight employees in the American work force, or 11.1 million workers, providing 17.6

million courses.[22]

Within these impressive totals lurk some important variations. These variations suggest ways in which the totals, large as they are, may fall short of what the nation actually needs. Four areas of shortfall in particular deserve attention.

Industries which are not Traditionally Knowledge-Intensive. The first of these shortfalls is defined in terms of industrial sectors. Training costs per employee have been estimated to vary across industries from $54 per employee per year (in the agricultural products and services industry) to $645 (in public administration).[23] Of particular interest is the set of industries where expenditures run below the national average. In general, they are "traditional" industries in which the typical skill requirements for employment are also low; heavy manufacturing is a prominent case in point.

Earlier in this century, dependence on a labor force with limited and obsolete skills may have been an acceptable, or even an optimal, human resources strategy for many American industries. But today, with the central importance of sophisticated technology in the production processes of even the most staid of industries, there really is no industry which can afford not to be "knowledge-intensive" any more. Nevertheless, traditional industrial practices change only slowly. In the meantime, these industries typically suffer from intense foreign competition.[24] The consequent loss of employment within the United States adversely affects the nation as a whole.

Smaller firms. The second shortfall is defined in terms of frim size. While eight out of ten of the largest firms in the nation (with more than 500 employees) are actively involved in formal training and provide training to an average of one employee in five each year, substantially less than half of all the firms in the nation are in the business at all. The majority of smaller firms--and particularly firms of very modest size (such as a dozen employees)--simply provide essentially no training.[25] In the private business sector, firms with more than 500 employees account for about 42 percent of all employment. In terms of reskilling, many of the tens of millions of workers among the 58 percent employed by the remainder of firms are left to their own devices.

Lower-Skill Workers. The third shortfall is defined in terms of the skill level of workers. A disproportionate share of the training provided to employees by employers is targeted on workers in managerial, professional, and other high-skilled occupations. Lower-skilled workers, and most prominently, manual workers, receive a disproportionately small share. Of all workers receiving employer-provided training in 1981, about 74 percent were "white collar." In 1984, about 37 percent of professionals and 24 percent of managers and administrators participated in some form of adult education; in that same year, only ten percent of blue collar workers did so.[26] As of 1976, only about three percent of the twenty million members of American trade unions covered by major collective bargaining agreements--about 600,000 individuals--were involved in training annually.[27]

Throughout, the 1980s, workers with lower levels of skills--and particularly unskilled and semi-skilled employees from manufacturing industries--have been at the center of the unemployment problems associated with structural change in the economy. They have suffered job loss in disproportionate numbers, and they have endured the most severe problems of extended unemployment and wage reductions.[28] Underinvestment in their skills contributes both to the declibne of their foremr industries and their difficulties in finding reemployment in alternative industries. Shortfalls in the amounts of continuous reskilling they received while while they were formerly employed contributed to this national problem.

Transferable Skills. The final shortfall in employer investment in reskilling is defined in terms of the nature of skills for which training is being provided.

As noted earlier in this testimony, economists distuinguish between two types of skills which might be developed thorugh training: "general" training, which raises a worker's productivity in a wide variety of employment circumstances, and "firm-specific" training, which enhances a worker's productivity only while working for that specific firm. Because firm-specific training only enhances the employee's productivity within the firm providing the training, competitive firms are unlikely to try to attract away the newly-trained employee; the enhanced productivity flowing from the training will therefore largely remain with the firm providing the training. But an employee given general training will be an attractive target for recruitment via higher wage offers to match his increased productivity. Alternatively, in order to keep the employee from being attracted away, the training firm must raise the employee's salary as fast as his productivity rises. In either case, the financial beneficiary of the training investment is the employee, not the employer; and therefore investment in general training is something that employers are extremely reluctant to provide.

The implications of this reasoning are clearer if we relabel the concept of "general training" with the more familiar phrase "transferable skills." In a typical job, there is little financial incentive for an employer to provide workers with skills readily transferable to other employment situations.[29] The ideal situation from their point of view of an individual firm is to be a "free rider," obtaining its trained staff by raiding employees trained by its competitors. But from the point of view of the economy as a whole, the reluctance of individual employers to make these investments leaves workers with less-than-optimal development of skills in broad demand.

The Supply of Training Services is Ample--if Someone is Willing to Pay

In diagnosing the causes of these shortfalls, it is useful to make a distinction of which economists are fond--that between supply and demand. When we say that there are important situations in which too little reskilling of currently-employed workers is taking place, do we mean that there are bottlenecks in the supply of training services? Or do we mean that the demand for these services is inadequate?

Our answer is definitely the latter. In general, the American system offers a huge number and rich variety of providers of training services. Among the many institutions involved are substantial in-house training staffs employed by major corporations; adult schools run by local school districts; community colleges and public vocational-technical institutes; four-year colleges and universities; proprietary trade, vocational, and business schools; training programs (including apprenticeships) run by organized labor; publicly-sponsored training programs under legislation such as the Job Training Partnership Act (JTPA); and the training system of the military. Many tens of thousands of training providers and 60 million or more persons may be involved in adult education or training in the United States each year.[30] This magnitude and variety suggests the supply side of the reskilling market is relatively free of bottlenecks, offering an ample set of options and likely to adjusting fairly readily relatively to changes in demand.

Of course to say that, in general, the supply of services is free of major bottlenecks is not to say that the supply is perfect, particularly in all localities. Observers have noted important deficiencies in course offerings, in administrative procedures,[31] in worker counseling and information services,[32] and in pedagogy.[33] Nevertheless, it is reasonable to assert that these deficiencies are neither so numerous nor so fundamental that they would prove resistant to change if ample demand for reskilling created attractive market opportunities. In legislative terms, this suggests that it would be inappropriate for Congress to tackle the problem of underinvestment in reskilling with public activity on the supply side, such as founding new training institutions, providing institutional support grants to training providers, or sponsoring demonstration projects. The solution must be sought where the problem is--on the demand side of the market.

The French Tax Credit as an Approach to Increasing Demand

What then might be done to enhance the demand for the reskilling of persons currently employed? In particular, since we have argued that the incremental and work-related nature of most reskilling makes it inevitable and desirable that employers control that reskilling, what might be done to enhance employer demand?

One promising approach is suggested by an arrangement which has been in operation in France for more than a decade.[34] Since 1971,[35] all employers in France with more than ten employees are required to spend a certain percentage of their wage bill on employee training. Originally, the amount that the firm was to spend was set at 0.8 percent of the firm's total expenditure on wages. This was subsequently raised in several steps to the 1.1 percent rate which has been in force since 1978. An additonal .5 percent obligation is imposed specifically to support apprenticeship programs. Thus, the total training obligation stands at 1.6 percent.

If a firm fails to spend the amount mandated by this percentage, then it must forfeit the residual to the national treasury.[34] That is, the law creates a tax liability with a credit; together, they are designed to create what the French refer to as an "obligation to spend." For the intent of the law is not to collect the tax. Rather, the goal is to induce firms to avoid the tax by making their own training expenditures.

Experience subsequent to passage of the law indicates that the combined tax and credit have in fact had the desired effect, at least as measured by total training expenditures claimed by firms. Training expenditures per worker have risen among firms of all sizes, as have the proportion of employees participating in some form of training. In 1979, firms financed training for 1.86 million employees, about 18 percent of all workers.

Moreover, increases in expenditures have been most pronounced been greatest in small- and medium-sized firms--precisely where, as we have previously discussed, a major shortfall is experienced in the American system. In 1972, firms wih fewer than 50 workers spent about 0.5 percent of their wage bill to train about 1.8 percent of their workers each year. In 1980, firms of this same size were making training expenditures of about one percent of their wage bill and training about four percent of their employees annually.[37]

While imposition of the tax and credit system has served to increase total expenditures on training, they have not interfered with the freedom of firms to utilize training resources in ways they find most efficient. The French government exercises little control over the subjects for training,[38] the selection of trainees, or means by which instruction is provided.[39] Resources may be expended on preventive training, to reduce the risk of redundancy from technological change; adaption training, for those looking for new jobs; training for occupational advancement through higher qualifications; or refresher training, for the maintenance of skills.

Adapting the French Approach to the American Context

A program developed in one national context can seldom be transported intact into another. Nevertheless, with certain modifications the French system seems to offer a useful model for addressing some key deficiencies noted above in the American system of reskilling.

The French experience suggests that a tax and tax credit mechanism addressing the issue of employee training can be expeditiously implemented in an industrialized market economy such as our own. It equally suggests that employers reactions to the mechanism move the economic system in a positive direction. To establish a similar mechanism in the United States would be in the best interests of workers, and employers, and the nation as a whole.

It is reasonable to assume that such a tax and credit system would fall relatively lightly on the largest firms in the United States,[40] as well as on firms in "knowledge-intensive" industries. The impact would therefore be primarily on smaller firms[41] and on firms in traditionally non-knowledge intensive industries. The effect would automatically be accurately targeted on two of the four situations of greatest current shortfall.

Careful legislative crafting would be required to ensure that the effect of the requirement was accurately targeted on the third area of shortfall--workers with lesser levels of skill. French experience parallels that in the United States in attesting that employers tend to spend more readily on training higher-skilled workers than lower-skilled ones. In the absence of requirements to the contrary, expenditures under the French tax and credit system have followed a similar pattern.[42] This experience suggests that it would be appropriate to restrict training activities for which credits could be claimed in a United States program, to target them on the area of greatest shortfall. For example, training activities might be made eligible for the tax credit only if they supported activities for employees whose wages were less than three times the minimum wage.

Careful legislative crafting would also be required to ensure that the tax and credit system would effectivly address the final shortfall--training for transferable skills. While it is desirable to leave employers maximum flexibility in designing their own training efforts, it does seem appropriate to define credit-eligible activities somewhat narrowly (for example, to exclude activities which are virtually indistinguishable from regular work activities) or to provide bonus incentives (for example, double credits) for particularly "general" forms of training such as instruction in remedial basic skills.

The final and perhaps most important question raised by the French example is whether the American business community would be wiling to accept yet another payroll tax.[43] Several developments in the United States suggest that they might.

The first of these developments is the creation of a tax in two states partially in the spirit of what is being proposed here. In 1982, the state of California established its Employment Training Panel (ETP) to train unemployed workers. The source of its funds is a tax of one-tenth of one percent of payrolls imposed on employers paying unemployment insurance simultaneously with lowering of the state unemployment insurance tax by the same amount. Delaware, following California s lead, established their own fund in 1984. It seems reasonable to assume that firms would be even more willing to tolerate such a tax if they were able to claim credits against their tax liability for their own training activities, directly benefitting their own employees.

A second indication that the American business community might be receptive to the proposal comes from the automobile industry, where labor and management have jointly agreed to impose a training tax upon themselves. Under provisions of collective bargaining agreements between the United Auto Workers and each of the "big three" American producers first negotiated in 1982, $.05 per worker-hour is set aside into special funds to support worker training activities. Skill modernization to prepare workers to adapt to new technology in auto production is a special emphasis of this effort.

Conclusions

Such examples suggest that many participants in the American economy--including both management and labor--are coming to recognize the central role of employee reskilling in preserving and developing America's economic strength. Guided by the example provided by French experience, the time is now ripe for the federal government to act to join in that developing consensus.

FOOTNOTES

1.On dislocated workers, see Marc Bendick, Jr., "Government's Role in the Job Transitions of America's Displaced Workers," testimony before the Committee on the Budget, U.S. House of Representatives, June 1983, reprinted in Terry F. Buss et al. (eds.), Revitalizing the American Economy (New York: Praeger Publishers, 1986, pp. 158-175.); Steven Sheingold, Dislocated Workers: Issues and Federal Options (Washington, D.C.: Congressional Budget Office, 1982); and Technology and Structural Unemployment: Reemploying Displaced Adults (Washington, D.C.: Office of Technology Assessment, 1986).

2.See Technology and Employment: Innovation and Growth in the U.S. Economy (Washington, D.C.: National Academy of Sciences, 1987).

3.Rapid occupational obsolescence is especially prevalent in scientific and technical fields. One study illustrating the problem plotted "information erosion curves" in universities' chemical engineering curricula from 1935 to 1960. This research estimated that chemical engineering students in the class of 1960 were taught only fifty percent of what had been taught as "applicable knowledge" to the class of 1950. And while it took the chemical engineering class of 1940 twenty years to fall to the fifty percent level of "applicable knowledge," it took the class of 1960 only ten years to do so. See B. Zelikoff, "On the Obsolescence and Retraining of Engineering Personnel," Training and Development Journal (May 1969), pp. 3-14.

4.Eva Mueller, Technological Advance in an Expanding Economy: Its Impact on a Cross-Section of the Labor Force (Ann Arbor, Michigan: University of Michigan Survey Research Center, 1969), p. 10.

5.H. Allan Hunt and Timothy L. Hunt, Human Resource Implications of Robotics (Kalamazoo, Mi.: Upjohn Institute for Employment Research, 1983).

6.Consider, for example, the contrast between manufacturing industries and hospitals. Hospitals hire physicians, pharmacists, and other professionals and then provide little training to supplement that which was prerequisite to their hiring. Workers hired in so-called entry-level hospital jobs, such as attendants, clerks, and maintenance workers, typically will not receive training to move into professional ranks. In manufacturing, in contrast, "tall" promotional ladders are more common. A worker hired as a laborer may work up to semi-skilled and skilled positions through a combination of formal training and on-the-job experience. Most hiring occurs at the entry level, and many higher-level jobs are filled by promotion from within. See Harold Goldstein, Training and Education by Industry (Washington, D.C.: National Institute for Work and Learning, 1980), p. 11.

7.See Richard B. Freeman, "The Evolution of the American Labor Market," in Martin Feldstein (ed.), The American Economy in Transition (Chicago: The University of Chicago Press, 1980), pp. 376-84.

8.Freeman, op. cit., p. 364. See also George Silvestri and John Lukasiewicz, "Occupational Employment Projections: The 1984-1995 Outlook," Monthly Labor Review 108 (November 1985), pp. 42-57.

9.In the first quarter of 1974, total separations from employment--including both departures from the labor force (such as retirements) and transitions from one job to another--averaged 28 workers per 100 employees for all industries. However, it ranged as low as 10 per 100 in typical manufacturing industries and 5 per 100 in public utilities. See Malcolm S. Cohen and Arthur R. Schwartz, "U.S. Labor Turnover: Analysis of a New Measure." Monthly Labor Review (November 1980), p. 12.

10.For example, over the decade 1984-1995, employment in the occupation of paralegal is projected to grow at a rate of nearly 10 percent per year, that of medical assistant by nearly 7 percent per year, and that of data processing equipment repairer by nearly 6 percent. See Silvestri and Lukasiewicz, op. cit., table 4.

11.For example, in 1985, workers under age 25 constituted 30 percent of the American labor force; by the year 2000, that proportion will drop to 16 percent. See U.S. Department of Labor, Workforce 2000 (Washington, D.C.: The Department, 1987). The rate of entry of women into the labor force--which accelerated rapidly during the 1970s--is also slowing.

12.Richard Bolles, "The Warp in the Way We Perceive our Life in the World of Work," Training and Development Journal (November 1981), p. 22.

13.See H. Allan Hunt and Timothy L. Hunt, Clerical Emoployment and Technological Change (Kalamazoo, Mi.: Upjohn Instuitute for Employment Research, 1986).

14.Another reason that such incremental reskilling is sufficient for keeping up with changes in the economy is that the job openings which are created by new technology do not necessarily require higher skill content than more traditional jobs; indeed, in many cases, the growing sophistication of the machines with which employees are paired means that the skill level of the itself can be reduced. Consider again, for example, the role of the robot maintenance worker charged with keeping an assembly line robot in operation. When an arm of that robot ceases to function, the maintenance worker does not halt the assembly line and skillfully diagnose and repair the arm. Rather, he simply replaces the arm module with a new one and probably discards rather than repairs the malfunctioning one. A similar example is provided by word processing machines which now can correct the spelling of badly trained typists. See Henry M. Levin and Russel W. Rumberger, The educational Implications of High Technology (Stanford, California: Stanford University Institute for Research or Educational Finance and Governance, 1983).

15. In this testimony, we frequently refer to "reskilling" rather than "retraining" to emphasize the informal, non-classroom nature of much of the learning process.

16. This principle, distinguishing investment in "general human capital" from "employer-specific human capital," was first enunciated by Gary Becker; see his Human Capital (Chicago: University of Chicago Press, 1964).

17. For some related evidence on this point, see John Bishop, "Academic Education and Occupational Training," in Design Papers for the National Assessment of Vocational Education (Washington, D.C.: U.S. Department of Education, 1987), especially p. v-38. This is a major part of the logic behind the requirement in the Job Training Partnership Act (JTPA) that federally-financed training programs for the hard-to-employ must be controlled by Private Industry Councils on which employers hold a majority of seats.

18. Ernst Stromsdorfer, "Training in Industry," in P. Doeringer (ed.) Workplace Perspectives on Education and Training (Boston: Martinus Nijhoff, 1981).

19. For example, prior to the nationwide breakup of the Bell System, AT&T was estimated to spend about five percent of its total wage and salary bill to support a training system with a 50 percent annual participation rate and an average expenditure of $1,000 per employee. See Harold Goldstein, Training and Education by Industry (Washington, D.C.: National Institute for Work and Learning, 1980), p. 40.

20. Williard Wirtz and Harold Goldstein, A Critical Look at the Measuring of Work (Washington, D.C.: National Institute for Work and Learning, 1975), p. 27.

21. R. L. Craig and C. Evers, "Employers as Educators: The Shadow Education System," in Gerald Gold (ed.) Business and Higher Education: Toward New Alliances (San Francisco: Jossey-Bass Publishers, 1981).

22. Of the total courses provided, this study estimated that about 68 percent were given in-house and the rest given by outside institutions. See *Employee Training: Its Changing Role and An Analysis of New Data*, by Anthony P. Carnevale and Harold Goldstein (Washington, D.C.: American Society for Training and Development, 1983), pp. 77-82.

23. Anthony P. Carnevale, "The Learning Enterprise," *Training and Development Journal* (January 1986), p. 20.

24. See Joseph Grunwald and Kenneth Flamm, *The Gobal Factory* (Washington, D.C.: Brookings Institution, 1985), and Robert Z. Lawrence, *Can America Compete?* (Washington, D.C.: The Brookings Institution, 1984).

25. Goldstein, *op. cit.*, p. 34.

26. Office of Technology Assessment, *op. cit.*, p. 275. See also Goldstein. *op. cit.*, p. 34; and Max Cary and Alan Eck, *How Workers Get Their Training*. Bulletin 2226 (Washington D.C.: Bureau of Labor Statistics, U.S. Department of Labor, February 1985), especially chapter 2; and *Training* (October 1984).

27. U.S. Department of Labor, *Characteristics of Major Collective Bargaining Agreements* (Washington, D.C.: Government Printing Office, July 1, 1976,), p. 76.27.

28. See Marc Bendick, Jr., and Judith Radlinski Devine, "Workers Dislocated by Economic Change: Do They Need Federal Employment and Training Assistance? in *The Federal Interest in Employment and Training* (Washington, D.C.:National Commission for Employment Policy, 1981), pp. 175-226.

29. Lifetime employment is one way to capture all training investments made in a worker. However, this is not a common feature of the American industry. Only about 500 firms in the U.S. describe themselves as offering lifetime employment. The more common pattern is that workers change jobs frequently. In 1981, the median job tenure for male workers was four years and for female workewrs, 2.5 years. See Francis W. Howath, "Job Tenure of Workers in January 1981," *Job Tenure and Occupational Changes, 1981* (Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics, 1983), p. 2.

30. For more on these institutions, see Bryna Shore Fraser, *The Structure of Adult Learning, Education and Training Opportunity in the United States* (Washington, D.C.: National Institute for Work and Learning, 1980); Marc Bendick, Jr., and Mary Lou Egan, *Recycling America s Workers*, *Public and Pribvate Approaches to Midcareer Retraining* (Washington, D.C.: The Urban Institute, 1982); and Marc Bendick, Jr. *Essays on Education as a Three Sector Industry* (unpublished Ph.D. dissertation, University of

Wisconsin, 1975), chapter 11.

31. One recent list of difficulties frequently encountered in seeking to participate in formal adult education included the following: course scheduling inconvenient or conflicting with working hours; courses offered at inaccessible locations; relevant courses not offered; restrictions of financial support for trainees; program is too long to complete; too much red tape; lack of information about courses; lack of information on support assistance; and inadequate counseling. See Office of Technology Assessment, _op_. _cit_., p. 303.

32. In one survey, 18 percent of blue collar workers cited lack of information as a reason for not participating in training. In responding to another survey, 42.6 percent of unionized workers stated that they lacked information about their negotiated tuition-aid program, and 50.7 percent felt that they did not receive enough counseling about course availability or their eligibility for the courses. See Ivan Charner, _Patterns of Adult Participation in Learning Activities_ (Washington, D.C.: National Institute for Work and Learning, 1980), p. 51-52; see also K. P. Cross, "A Critical Review of State and National Studies of the Needs and Interests of Adust Learners," in _Adult Learning Needs and the Demand for Lifelong Learning_ (Washington, D.C.: National Institute for Education, 1978), p. 15.

One response to the need for information and counseling sprang up in the 1970s in the form of educational brokering services. This term covers a variety of client-focused programs started by community organizations to provide services such as outreach, educational and occupational skill assessment, counseling on occupational and educational planning, delivery of information, advocacy for clients with institutions which erect barriers to adult learning, and referrals to social service and educational resources. The National Center for Educational Brokering identified 302 educational informational and counseling services in operation as of 1978, serving about 900,000 adult clients. They were operated under many different administrative settings, including community agencies such as librairies, sectarian social service agencies, and YMCA and YWCAs, as well as colleges and universities. See Paul Barton, _Worklife Transitions_ (New York: McGraw Hill, 1982), p. 60-62.

33. One major way in which the delivery of training can often be improved is through adapting the training to the special needs and circumstances of midcareer workers. For example, psychological barriers to "returning to school" can often be reduced by making the training environment as much as possible like a job rather than a school. In Sweden, many training institutions make extraordinary efforts to to create a "work-like" atmosphere in their training centers. See Marc Bendick, Jr. "The Swedish Active Labor Market Approach to Reemploying Workers Dislocated By Economic Change," _Journal of Health and Human Resources_

Administration, 6 (Fall 1983), pp. 209-224.

34. This section draws heavily on Vocational Training-Supplement France by Bernard Pasquier of the Centre Pour le Developpment de L'Information sur la Formation Permanente (INFFO) (Brussels: Commission of the European Communities, 1977), pp. 1-49.

35. The current system evolved out of a number of legal texts (in 1959 and 1968) and policy guidelines (1968-1970), preceding passage of Law 71-575 of July 16, 1971, on "The Organization of Further Vocational Training in the Framework of Permanent Education." This law not only established the tax and credit system described in the text. It also articulated a workers' right to training and retraining throughout their working life.

36. Funds collected through this mechanism constitute part of general revenues and are not earmarked for training. However, if a firm wishes, it can receive credit toward its tax liability by donating providing funds to publicly-supported training programs for the unemployed.

37. In contrast, firms with more than 500 employees were already spending about 1.9 percent of their wage bill and serving 17.8 percent of their workers in 1972; by 1980, they spent about 2.7 percent of their wage bill and served 30 percent of their work force. See Centre d'Etudes et de Recherches sur les Qualifications, Statistique de la Formation Professionnelle Continue Financee par les Entreprises (Paris: La Documentation Francaise, 1981), p. 9.

38. The law does requires that, in firms with more than fifty employees, management must consult with the firm's "works council" of employee representatives in developing an annual training plan.

39. In 1975 about 56 percent of courses provided under the system were given by the firm, while the rest were purchased from training suppliers outside the firm.

One option within the latter approach allows firms or industries to delegate their training obligation by making a financial contribution to a Training Insurance Fund (FAF). These funds accounted for only about six percent of total training expenditures nationwide, but they are particularly important in meeting the needs of small and medium-sized firms in well-organized trades or industries. Funds are established by agreements among employer organizations, employee organizations, or trade unions and may cover one industry or several. In 1975, 88 funds covered 45,000 firms and 2.32 million employees.

40. The requirement might induce some increase in reskilling activities even for these firms. Suppose that the level of expenditures were set at the same level as in France--1.6 percent of a firm's total wage bill. It has been estimated (in Goldstein, op. cit.) that even large American firms (those with 500 employees or more) average somewhat less than one percent of their payroll cost in direct training expenses (somewhat less than two percent if trainee wages are also considered).

41. Because small firms represent a major area of shortfall and, collectively, a major employer, it is important that the tax and credit system cover firms of even very modest size. However, it might be appropriate to exempt firms during their first, fragile years of operation.

42. For example, in 1979, unskilled workers accounted for only 16 percent of trainees for whom credits were claimed. Simultaneously, substantial credits were claimed for English-language lessons for French middle managers and for executive study programs at pleasant seaside resorts.

43. The basis of the system should be a payroll tax, rather than the corporate income tax. While virtually all employers pay payroll taxes, the employers of many workers--including corporations with no profits and governmental and nonprofit organizations--do not face the corporate income tax.

Representative **Scheuer**. That was extremely interesting. Maybe you can help us get the specifics on the French program. That was very interesting.

OK, Mr. Carnevale, we are happy to hear you for about 8 minutes and then we will have some questions for all of you.

STATEMENT OF ANTHONY PATRICK CARNEVALE, CHIEF ECONOMIST AND VICE PRESIDENT, NATIONAL AFFAIRS, AMERICAN SOCIETY FOR TRAINING AND DEVELOPMENT

Mr. **Carnevale**. I think much of what we've heard today points toward a missing piece in the American training and development system, and that missing piece is really some sort of training and development structure inside the workplace, inside the economy itself.

We've got lots of investment—$150 billion in the elementary and secondary education system, $100 billion in the higher education system—lots of infrastructure prior to work. We've got very little infrastructure in the workplace. There is almost no learning system there except as one finds it in large institutions like Motorola, AT&T, and a host of others where one would expect to find those kinds of commitments made.

Two pieces of the issue have come up today as to how one improves the performance of people on the job. The first is that their preparation needs to be different and better. I think the implication here is pretty clear, that the American education system, for the most part, with rare exceptions, is not teaching the appropriate set of skills. Most of the skills that are missing are affective or soft skills, the ability to work on a team, the ability to interact personally, the ability to take responsibility, and so on.

In terms of the skills that are traditionally taught—reading, writing, and arithmetic—there is an additional problem and that is that those skills are not taught in some applied or functional context. And that's how a person learns to solve problems. That is, by practicing solving problems in the real world.

The other piece that's come up is the notion that we need some sort of a learning system in the context of work itself. I think the appropriate way to do that, as has been mentioned by others, is to use the economic policy system to do that and not public bureaucracies. That is, to use the traditional mechanism.

When we discovered in the 1960's before the Kennedy tax cut that employers were not expending enough on hard capital, we gave them an incentive—in fact, a whole series of incentives over a decade to do so, many of which we're rescinding now, having gone pretty far down that road.

It seems to me that the response in the case of human resources is very similar. We need to change the investment incentives to employers so that they will invest more in persons on the job. We need to do so in a fairly flexible, voluntary way with a minimum of public bureaucracy and public participation I would add. Give them an incentive that pays 25 cents on the dollar for some marginal increase in training.

In the long term, it seems to me that not only will that increase the amount of training, but it will start training and development in places where it simply doesn't exist in the American system. That is, in middle-sized firms, in small firms, in a host of institutions where there is insufficent size to support a training function of the size and scope of Bill Wiggenhorn's and those of other large institutions.

There are, I think, a couple other benefits of this sort of thing. It will create infrastructure on training. If we build some sort of tax incentive, we will increase the overall demand for training and many employers—especially the smaller employers if they have an incentive to spend money on training—will use that incentive and buy the training outside from any one of a number of the crazy quilt of training and development institutions in the public sector.

I think when you build an incentive into the economy, the smartest way to do it is to give the money to the customer and not to the provider, and let the institution buy from whoever they like.

Representative **Scheuer**. When you used that expression "the crazy quilt" of training programs, is that a pejorative expression?

Mr. **Carnevale**. No.

Representative **Scheuer**. Or a neutral expression? In other words, do you think it's bad that there's a lot of pluralism and a great variety of training programs? Do you think it should be narrowed down in a much more organized set of programs or is this splurge of uncoordinated programs good?

Mr. **Carnevale**. If there's anything I've learned in years and years of doing analysis of programs—and I've spent a fair amount of my career doing that—it is that one discovers that everything works somewhere, nothing works everywhere. Everything is dependent on the local community and culture and economic situation. In some places, the best provider is a junior college and in other places it's a 4-year university; in another place, it's a private provider, and so on.

If you put the money in the hands of the customer, in this case the employer institution, you will have essentially built a market in training. People will come forward at that point and try to customize their training to employer needs and providers will do a better job of responding to the needs of employer institutions at that point.

That I think is the virtue of that kind of approach. If you give the money to the supplier, what happens is that the supplier continues to do what it has always done and thereby tends to be less responsive to employers.

Representative **Scheuer**. Excuse me. Mr. Bendick, in France I take it they give the money to the customer and not to the supplier?

Mr. **Bendick**. That's right. It's very much a system in which, again, a great proliferation of suppliers compete to meet the needs that are dictated by the employers. The employers are the ones making the decisions about what needs to be trained for.

Representative **Scheuer**. Very good.

Mr. **Wiggenhorn**. And that is true, sir, in the Singapore Government Employment Tax and also the Scottish Development Fund. There are similarities among those three.

Mr. **Carnevale**. Let me conclude with a very quick set of remarks about what I think are essentially the politics of this issue.

The politics are very difficult. The human resources lobby in the United States is largely made up of public institutions. One finds very few employer institutions like Motorola who are willing to come forth and speak on this issue. They prefer capital subsidies. One owns machines, understands them clearly. There are a whole set of incentives for employers to have government subsidies for machine investment rather than human investment.

And the organization of the government itself is not friendly to policies of this kind; that is, the major departments and committees that are responsible for these things are committees and departments tied to——

Representative SCHEUER. Committees and departments in government?

Mr. CARNEVALE. In government.

Representative SCHEUER. Do you mean the Federal Government or the State?

Mr. CARNEVALE. Federal and States, the same. If you want to build a training program in the United States, the appropriate jurisdictions downtown are the Departments of Education and Labor; and the appropriate jurisdiction here is Education and Labor and Human Resources, and those committees are very tightly tied to public delivery mechanisms.

The tax committees where one would move a proposal such as the French system are essentially unfamiliar with this issue and are not terribly interested in this issue—never mind the other constraints they operate under these days.

But our policy structure was never built to build human resources programs that were responsive to economic needs. It was built for human resources programs responsive to—appropriately so—the problems of the Great Depression and the great society and the problems of the disadvantaged, and lately, the dislocated.

When one thinks about employed persons, one wants to build some sort of program structure along the lines of the kinds of capital and other economic incentives that we've developed over the years and those are the appropriate kinds of mechanisms considered by committees that are unfamiliar with this issue.

Representative SCHEUER. So you're more or less rephrasing the message that we got from Mr. Bendick that we are perhaps overspending on employer deductions for social purposes, for health, for retirement, and so forth, and underspending on employer deductions for education and training of workers? Is that a fair paraphrase of what you were saying, Mr. Bendick?

Mr. BENDICK. Like everyone else, I want more of both.

Representative SCHEUER. Yes.

Mr. CARNEVALE. I would say that we're running the risk in both employer institutions and in our governments of doing exactly that. That is, spending for what I would call maintenance and that is for consumption purposes. In the case of the Federal Government, for instance, it seems clear that the next agenda in human resources has to do with funding of nursing care for the elderly, expansion of current entitlements. There is a squeeze on, both in governments and in employer institutions, on developmental spending in human resources.

The cost of benefits in employer institutions is going up and will likely go up still further as the Federal Government, I think, shifts those costs toward employers.

What we're doing, I think, very slowly but very carefully is, we're ratcheting down the amount of developmental spending for adults in the United States and substituting for that a slow and steady increase or maintenance really, given inflation, of spending for purposes that reflect consumption and not development.

[The prepared statement of Mr. Carnevale follows:]

PREPARED STATEMENT OF ANTHONY PATRICK CARNEVALE

First, Mr. Chairman let me express my gratitude to you and members of your Committee for allowing us to testify here today. We are the American Society for Training and Development. Our membership includes roughly 50,000 employer-based training and development professionals, mostly from the nation's Fortune 1000 companies. It is our membership that is largely responsible for the retraining of the nation's employed workforce in response to economic and technological change.

Our members manage an employer learning system that includes as much as $180 billion in informal on-the-job training and an additional $30 billion in formalized learning paid for by employers. By way of comparison, this $210 billion learning system is roughly the same size as the nation's public elementary, secondary and higher education institutions.

It is our view that this learning system is the nation's first line of defense against economic and technological change. The ability of American employees to adapt to new technologies and other forms of economic change is largely dependent on their ability to learn on the job. Economic and technological change occurs incrementally and impacts first on the nation's employers and employees on the job. As a result, our ability to respond to competitive challenges is largely dependent on the quantity and quality of formal and informal learning in the workplace. More effective and timely workplace learning systems would not only allow us to better keep pace with changing technologies and economic circumstances, but would also encourage more self-conscious career development from employees, as well as minimize dislocation.

In spite of their importance, workplace learning structures are a dark corner in the nation's human resource development system. We know little about formal and informal learning on the job. Consequently, the structures are not fully utilized as tools for expediting strategic change in employer institutions or for minimizing employee dislocations.

Until now, public policy considerations have, as a matter of good social policy, focused on the disadvantaged and, more recently, the dislocated job seeker. The recent national interest in competitiveness, however, has brought an additional dimension to the national human resources debate. We are now interested in the employed as well as the unemployed population. It is the ability of the nation's employed workforce, after all, that will determine our response to the competitive challenge.

I think we can all agree that a competitiveness strategy cannot succeed without a strong human resources component.

The legislative response to the competitiveness challenge thus far has been to propose the formulation of policies to improve educational preparation for work and to assist employees dislocated by economic change. These policy proposals are welcomed by the employer community and their value cannot be overstated. The relationship between education and the productivity of American economic institutions and the earnings of individual employees is powerful, especially over the long term.

In the short term, however, skill changes that are driven by technological and economic change impact first on the workplace. It is in the workplace that learning systems need to be responsive. Eventually, of course, incremental skill changes accumulate until they impact on the educational preparation for work. Sometimes the introduction of new technology requires an increase in the overall level of basic skills among the entry-level working population. Other times, specific skill changes in individual occupations can alter the necessary occupational preparation for work or create whole new occupations as in the case of manufacturing engineering over the past fifteen to twenty years.

Ultimately, the education and pre-employment education and training system needs to be responsive to economic and technological changes over the longer term while the employment-based learning system needs to respond in the very short term if the competitive advantage of individual companies and whole economies is to be maintained.

Federal, state and local governments are making significant progress in reforming and reinvigorating the nation's education system. At the same time, however, there is little practical attention being paid to the quantity and quality of learning in the workplace. We have built substantial infrastructure for human resource development outside the workplace but we have done nothing to encourage the quantity or the quality of retraining on the job.

Indeed our tax system has created an investment structure that heavily favors machine investment in the workplace and discourages investments in employees. In the end, the current investment structure encourages an over-reliance on technology in employers' strategic planning as well as underinvestment and eventual dislocation of human resources. Strategies for improving the responsiveness of workplace learning to economic and technological change are the missing link between the nation's human resource development system and the maintenance of competitive advantage.

Impediments to effective strategy for improving learning in the workplace are both political and economic. The national human resources lobby is made of public education and public job training institutions. As a result, when human resource issues arise there is a natural temptation to use public infrastructure to resolve them. The effectiveness of public education and training institutions is critical to the health of the nation's culture, polity and economy. In an individualistic culture and a participatory polity, one cannot overstate the importance of education in public job training institutions in providing the nation with autonomous and free-thinking individuals, capable of making many of the difficult political and economic decisions that face each of us as citizens. Moreover, in a purely economic sense, the nation's public education and job training institutions need to provide the citizenry with basic behavioral and intellectual skills to get and keep a job.

In addition, the nation's post-secondary vocational training system and universities are essential sources of a ready supply of skilled labor in specific occupations and professions. These institutions are important now and they will become more important later as the declining 16 to 24-year-old cohort increases labor scarcity throughout the economy. The decline in the number of young people will result in a situation where both the quantity and quality of entry-level labor is likely to decline. There will not only be fewer entry-level job seekers to choose from, but the entry-level labor pool will be increasingly comprised of groups in whom previous human capital investments have been insufficient.

Public institutions, especially public job training institutions are especially useful as intermediaries between job seekers and employers. Public job training institutions have been successful at developing jobs and finding jobs especially for disadvantaged clientele. At the same time, however, public education and job training institutions find it difficult to respond to emerging skill requirements that result from technological and economic change because they are located outside the economic system. That is the most sensitive and immediate barometer of those changes. Training outside the context of work is unresponsive to learning needs that emerge incrementally in the workplace. Moreover, training outside the context of work is less effective because it cannot duplicate the peculiarities of individual employer needs, the learning context of the working team, and the timeliness of learning systems that are embedded in the workplace close to the point of production.

A second impediment to the development of a training system embedded in the workplace is the structure of the human resource policymaking system. There are two policy structures in American government: one that deals with employers and a second that achieves public purposes through the utilization of appropriated public bureaucracy. The human resources policy system is heavily weighted towards the public side of the policy structure. The Labor and Human Resource Committee in the Senate and the Education and Labor Committee in the House largely operate through publicly appropriated delivery systems. The Departments of Education and Labor are also responsive to public institutions outside the workplace. Moreover, these institutions tend to garner strong support from organized labor and an assortment of public institutions and demographic interest groups that derive upward mobility and a substantial share of their employment and income from the public sector.

Economic policy systems include Ways and Means and the Finance Committees in the Congress as well as the Treasury Department, the Council of Economic Advisers and some other departments such as the Departments of Defense and Transportation in the Administration. These institutions tend to be responsive to business concerns and to deliver services through market-based tax incentives.

Historically, these two policy systems have focused on complimentary but different sets of issues. The human resource development policy system, especially in the federal government has tended to focus on those who did not share in the largess of the American economy. The economic policy system has tended to focus on economic institutions in the mainstream. Traditionally, the economic policy system has taken little interest in human resource issues as a lever for competitiveness and economic growth. This means that for business, our current difficulty is that questions surrounding the use of human resources as a lever for productivity and competitive advantage suggest a need for the inclusion of human resource issues in the economic policy structure.

Initial attempts on the part of the Finance and Ways and Means Committees to include human resource development tax policies have emerged in the context of the trade debate. The attempt to connect policies for dislocated workers to trade legislation is likely to continue outside the jurisdiction of the human resources policy structure. The effect, unfortunately, is to encourage a haphazard and uninformed debate outside this Committee and the Education and Labor Committee where jurisdiction and expertise is more appropriately placed. At some point in time, if we are to seriously consider human resource policies connected to the workplace, we will need more cooperation between the two policy systems and the two sets of congressional committees.

The most serious impediment to crafting an expanded human resource policy in the context of the jobs and competitiveness debate, of course, is the oversized federal deficit. Until some progress is made in the deficit, it is unlikely that we will be able to expand policy in any arena. If we were to follow Gramm-Rudman targets, reducing the deficit by roughly $75 billion this year and by roughly $130 billion in the two successive years, we would have the deficit down to roughly $75 billion. I would not recommend deficit reduction beyond the $75 billion mark because reduction beyond that point would act as a drag on economic growth. If we could reach the Gramm-Rudman target over the next three years with an accompanying fifteen percent decline per annum in the value of the dollar and three and one-half percent growth in the remainder of the world economy, it is not unreasonable to suppose that the current trade deficit would melt away. At that point in time, it is likely a surplus toward savings would emerge in the American economy and private economic institutions would not be able to generate sufficient investment to utilize the full savings available. At that point it would be up to the government to find ways to channel the savings surplus toward a set of investment priorities. Hence, it is conceivable that by 1990, sufficient funds will be available to consider expansion of a human resource investment agenda directed through public institutions and tax incentives in the private economy.

The most direct approach toward improving the learning system in the workplace would be to enact some form of tax incentive to encourage more employer-based training.

Such an incentive would encourage more responsive adaption to economic and technological change. An incentive for workplace training would also discourage dislocation, by putting human resource investment on a more equal playing field with machine investment. A training tax credit would encourage employers to respond to competitive challenges through human resource, as well as machine investment. Employers who utilize their human resources as a competitive resource would be less likely to allow technological investment alone to drive their competitive strategies.

A competitive strategy that relies on technology alone tends to encourage dislocation. And because technology and trained labor are compliments, an investment strategy that emphasizes technology and de-emphasizes training tends to result in more machines and fewer people who know how to use them. Moreover, as training investments became more apparent to employers, employers would be loathe to lose training investments by firing employees during downturns or as a result of economic and technological change.

Many criticize the notion of a tax credit for employer-based training because they believe it would simply substitute for informal on-the-job training that already occurs. In my view, the formalization of informal OJT would be a good thing. Much of informal on-the-job training is ineffective, inefficient and unfairly distributed because of its informality.

Moreover, a tax credit for employer-based training would have important institutional effects. Currently, the human resource function is a relatively weak political institution inside the workplace. A tax credit would empower the human resource professional in the nation's employer institutions. In addition, the external authority of a tax credit would increase the visibility and strategic role of training in employer institutions.

Finally, a tax credit would provide a rallying point for the human resource development community. The current structure of employer-based training is highly decentralized and fractionalized in the separate employer institutions throughout the nation. There is no regulation, legislation or institution that focuses on the state-of-the-art in employer-based training. An employer tax credit for training would encourage the nation's employers and human resource professionals in the workplace to come together in order to enter into a dialog with the government over the tax accounting and programmatic issues associated with the tax credit.

The tax credit would act as a focal point which would encourage the evaluation of programmatic effectiveness and professional development that would encourage the state-of-the-training-art to improve over time. Moreover, once infrastructure and some institutional cohesion became a reality in the employer-based training world, it would be a lot easier to talk about partnerships between employment training professions and public education and training institutions and their counterpart institutions in the workplace. Over the past twenty years, educators and public job trainers have attempted to make the connection to workplace training institutions with relatively little success largely because their counterpart training and development professions in the workplace are not sufficiently organized or empowered to make successful partnerships possible.

In sum, a better understanding of training and development in the workplace would help education and training providers outside the workplace to develop practices that compliment learning on the job. A better understanding of employer-based training would create stronger linkages between learning on and off the job and encourage a more cohesive life-long sequence for job-related learning.

Several tax subsidies for employer-based training have been introduced over the past five years. The major impediment to their passage, of course, is the current revenue shortfall. While passage of such a subsidy is premature, now is certainly the time to begin the discussion. We hope that this Committee will take an interest in these workplace issues and participate with ASTD and other institutions as the national conversation on workplace human resource development continues. In the meantime, ASTD in conjunction with the U.S. Department of Labor has initiated a major research project to improve the overall quality of workplace training by focusing on best practices among American employers. We will report to you on our progress.

Now, let me turn to a discussion of policies for improving the prospects of the nation's dislocated workers. It is my general bias that the best thing that one can do for someone who is out of work is to find them a job. Training will not create jobs. Indeed, it is the job that creates the specific training needs. Training outside the context of a job is minimally useful. While this seems a simple bit of street wisdom, it is a piece of logic that was lost on most of us in the 1970s. During that period when there weren't enough jobs to go around, our response tended to be to "let the unemployed eat training." Not suprisingly, we discovered during those early years in the CETA program that the training that worked best was the training that was done on the job.

As a result CETA became the Job Training Partnership Act. Under JTPA, OJT has been emphasized as a priority treatment and the governance of the JTPA program has been connected more strongly to employer institutions. JTPA is now more job development and job finding than a training institution and that's as it should be.

We need to apply the lessons we learned under CETA and JTPA to the new problems of the dislocated employee. First, as a general rule it seems apparent that services for dislocated workers should be provided in the context of work. Where possible, employers should be encouraged to provide counseling, outplacement and job search assistance while employees are still on the job. Employers should be rewarded with federal assistance when they supply early notification and willingness to provide outplacement, counseling and job search assistance services on the job.

Inevitably, some employers will not supply prior notification or want to provide outplacement services. Many employees will ultimately have to leave the psychological shelter of the workplace. Once employees are dislocated, all the federal resources and energies of local program providers should be directed towards finding and leveraging dislocated employees into another job. Direct hiring subsidies in the form of training or simple wage subsidies are the most effective and, by far, the cheapest way to encourage hiring.

Federal experience with hiring incentives have been mixed. In general, hiring incentives targeted on the disadvantaged such as Targeted Jobs Tax Credit have not worked well, while our experience with untargeted hiring subsidies such as the New Jobs Tax Credit has been much more positive. One would suppose that since dislocated workers are not generally disadvantaged, that hiring subsidies focused on dislocated employees might work reasonably well.

The WIN tax credit targeted since 1971 on the hiring of welfare mothers was a dramatic failure. The largest amount of credits claimed in any single year has been 50,000. Over a two-year period, when 500,000 WIN recipients entered the labor market, only 88,000 credits were claimed. The Targeted Jobs Tax Credit hasn't fared much better. It was used almost exclusively for low-wage, low-skilled jobs. Half of the credits were initially used by students working part-time and 25 percent of the recipients were registered after they were already on the job. Moreover, the truly disadvantaged who are recipients of such a largess, tend to be "labeled." Their place at the end of the hiring cue and their status as "undesirable employees" is the message that gets sent when job seekers arrive with subsidies targeted on the "disadvantaged" in hand.

Our experience with untargeted hiring subsidies, however, has been much more positive. The New Jobs Tax Credit, enacted in 1977, generally was not known among employers and lasted only a single year. Yet, our experience with the NJTC was remarkably positive. The tax credit amounted to 50 percent of the increase on each employers' wage cost above a 102 percent of the previous year's wage bill. The Department of the Treasury reports that firms claimed $1.5 billion in tax credits and created a gross number of 1.1 million jobs. Subsequent analyses suggest that 300,000 to 500,000 of the new hires were people who would not have been hired otherwise. The net cost to government for each new job was about $2,600 to $4,400 per new hire which compares favorably with all other forms of job creation.

Many complain that the windfall to employers from such a scheme is excessive. In fact, the windfall is probably less for a marginal wage or training subsidy than for other forms of job creation. The cost-sharing implicit in a marginal subsidy discourages unnecssary hiring. The windfall that might result from subsidies for employees who would have been hired anyway can be curbed by adjusting the historical base that triggers the subsidy. The New Jobs Tax Credit mentioned above, for instance, could have allowed for all hires over 104 rather than 102 percent of the prior year's wage bill for an individual firm.

Some windfall is inevitable in any incentive strategy that uses the carrot of subsidy rather than the stick of direction and regulation. We already tolerate many such windfalls in our economic policies. It is an ineffciency we are willing to tolerate in our capital subsidies: for instance, research and development tax credits, investment tax credits and depreciation allowances all pay for substantial amounts of plant and equipment that would have been procured anyway.

The question of whether it is better to deliver such incentives through appropriated programs or through the tax code remains. The tax credit is the principle device for providing incentives for employers. It is popular because it allows individual and institutional choice about program participation. Tax-based delivery systems are also flexible. One needn't set program levels and provide appropriations before the actual use of the tax incentive. Use can also vary over time without changing the tax delivery system. Tax programs are generally regarded as cheaper to operate, although administrative and compliance costs are often vastly underestimated.

Tax-based employment training subsidies do present problems, however. Firms that pay no taxes cannot participate in the subsidy program. Employers that pay little tax have little incentive to participate. A refundable tax credit resolves much of that particular problem. Even refundability, however, would still deny participation to private non-for-profit and public employers. Since almost 1 in every 3 American jobs is paid for with public or not-for-profit funds, participation of such firms would expand the range of the subsidy program and would be desirable. Hence, if a wage or training subsidy is to reach all major employers, it would have to be refundable and include an appropriated element. In sum, a tax credit would have to be refundable and accompanied by an appropriate voucher if we are to reach the full range of American employers.

Marginal wage subsidies are also the best way to create jobs because they are the least expensive. The most expensive job creation strategy is general expansion. It has been estimated that in 1978, at least $44,500 of general spending increases or tax cuts were required to create a single job (Bassi, 1981). Tax cuts targeted on investment rather than consumption, create even fewer jobs. Costs vary tremendously among more specialized job creation strategies. A job created through expansion and public work spending costs as much as $30,000. Public service jobs can cost up to $9,000. An untargeted subsidy that paid only part of hiring cost, however, requires somewhere between $3,000 and $8,000 per job.

Marginal wage and training subsides could also be constructed to maintain jobs for employees threatened with dislocation. Subsidies allowed during downturns could maintain employment up and outward at reduced prices. The cost of wage subsides to sustain employment for those who would otherwise be temporarily laid-off, would be offset by savings and unemployment insurance and revenue recaptured through taxable wages. Output would be generated at lower prices reducing the burden on macroeconomic restraint. In addition, the marginal subsidy would require an employer contribution which would encourage continued employment only for those whom the company truly intended to keep over the long-term. Employees would be maintained in real jobs as opposed, for instance, to make-work jobs where output has little positive impact on productivity and prices. Such subsidies would also encourage maintenance of employees in the work setting where they can use their skills and even increase them if additional slack time is utilized for more on-the-job training.

In many parts of the country, however, and during severe economic downturns, no amount of wage subsidy or hiring incentive can create jobs where there are none.

Where there are no jobs, jobs must be created. There is much useful public work to be done. In the employment and training debate, the emphasis should be on employment. Training and other kinds of work-related policies should be encouraged in the context of a job. In my view, this holds true for disadvantaged, dislocated and employed Americans. The role for public institutions is to act as an intermediary to encourage positive transitions between jobs and on-the-job training experiences. In cases where outplacement or other necessary services cannot be performed in the context of work, public institutions should supply them. In the limit where jobs are not available, the public sector should act as the employer of last resort.

In closing, let me say that the best training system is probably a fully employed workforce. Working and learning are inextricably intertwined. I would also contend that full employment is a more realizable goal than it has been since the late 1960s. Inflation is out of sight and will be over the foreseeable future. Unfortunately, inflation is not out of mind; anti-inflationary policies currently in place encourage an unnecessarily high unemployment rate. The absence of catastrophic inflationary risks in combination with the declining numbers in the 16-to-24-year cohort portend possibilities for rates of unemployment without inflation that we have not experienced since the late 1960s.

The potential low unemployment that can be realized as the result of the happy combination of a declining demography and relatively low inflation cannot be realized, however, until we get beyond the current macroeconomic barriers. Most notable among those barriers is the current federal deficit.

The current deficit not only inhibits our ability to move toward full employment, but also denies use of the resources to respond effectively to the training needs of disadvantaged, dislocated and employed Americans. Significant reductions in the current federal deficit are the cornerstones for fuller employment and the development of public and private education and training institutions that can be responsive to accelerating economic and technological change.

Thank you.

Representative **Scheuer**. Well, I very much appreciate your testimony. This was a marvelous panel. The point that you're making, Mr. Carnevale, is absolutely valid. As we have extended life, we have extended enormously the cost of maintaining life. There's almost an endless proliferation in sight of the cost of maintaining an increasingly aging population.

Nursing home costs, home care costs, hospital sickness care costs—three-quarters of the health care systems or methodologies that we are employing were unknown as little as 8 or 10 years ago. They are high tech. They are extraordinarily expensive.

And as our preoccupation with maintaining the quality of life for our elderly grows, so is the price tag growing and the cost of health care is growing. We have, by far, the highest cost of health care in the world, not only as a per capita amount, but as a percentage of GNP. We spend somewhere between 11 and 12 percent of GNP on health care.

Increasingly, that's spent in the very first months of life and the very last months of life. We spend hundreds of thousands of dollars per individual in the first 3 months of life for an underweight premature baby. We spend more in the first 3 months of life and in the last 3 or 4 months of life than we spend in the entire middle period of 70 or 80 or whatever number of years.

So our preoccupation with health care for the elderly and health care for very needful newborn infants is competing with the health care of the entire population after the first 6 months and before the last 6 months. We're pitifully underspending on kids. An astonishing number of kids arrive at draft age and have never seen a doctor or have rarely seen a doctor and have never seen a dentist.

So our concern with the health care at the two ends of the spectrum not only competes with health care in that vast middle, but nonhealth-care—urgent nonhealth-care expenditures that we need to make, not of the consumer variety but of the capital investment in human beings variety and exactly the kind that you're talking about.

And this is a problem that our Congress is going to have to wrestle with. We have to figure out a way of rationing health care so that we have resources to spend on the portions of the health care systems where we are painfully underspending. And we must also divert some of those resources to other systems like worker training and education that are critical to maintenance of our standard of living and the productivity of our economy.

Let me just ask you a couple of questions. We have a roll call vote coming up pretty soon and I hope to get a couple of questions in.

In an era of budget austerity such as we're in now, what are the most cost-effective means that the Government could use to stimulate more investment by private employers in training and retraining of their workers?

Mr. **Carnevale**. I think that probably the least costly method would be some sort of a fairly low-paying tax credit. That is, something on the order of 20 cents on the dollar for every dollar an employer spent over 104 percent of the last 3 or 4 years average, for instance. The cost of that, by my very rough calculations—and it deserves more attention than I gave it—would be something under $700 to $800 million.

Representative SCHEUER. How much would that come to as a percent of payroll?

Mr. CARNEVALE. I don't know. That's a good question. Well, the estimated increase in actual spending by employers for that would be roughly $6 to $7 billion I think. The increase in the overall investment that would result from that tax revenue lost to the Federal Government would be very substantial because for every 20 cents you're giving them you get back 80 cents in spending on their part. Now there will be some substitution there. That is, institutions will find ways to make the Federal Government pay for things they are already doing, but that should be marginal, especially after 3 to 4 years.

Representative SCHEUER. Let me ask the rest of the panel. What are the most cost-effective things that the Federal Government could do in a time of austerity and limited application of resources for this purpose, the most cost-effective means of upgrading skills of employees?

Mr. BENDICK. I would agree with Mr. Carnevale that that general form of employer tax credit is a very strong candidate.

Ms. MEDVED. Canada implemented an employment tax credit system several years ago and we abandoned it. In our experience, we found that it was very costly, that it was administratively cumbersome, and the employers did not want to avail themselves of it.

We now do more or less a pro rata share of training and the same problem occurs in that. You may make an employment tax credit work. There are a lot of pitfalls in it. It's not as simple and clean and efficient as it looks.

The main problem that we have is what was mentioned before, that the employer is really basically doing what he may have otherwise done or finds that they take the training on for a period of time because they have basically cheap labor because the Federal Government is topping off the cost of wages and then releases the person and takes in another person to become trained at the same job. I'm talking at lower skill levels, which is the repetitive training positions in order to have top-off of wages and that could also happen in an employment tax credit system.

Representative SCHEUER. What are the things that the Federal Government could do to stimulate greater State programs of training and upgrading the skills of workers?

Mr. WIGGENHORN. I think we need a campaign, like we have in trying to educate people about AIDS and other major issues.

One of the things they did in Singapore was produce a miniseries. Instead of watching the "Thornbirds," you were watching "Singaporean Productivity." Why? The message was you'd better get to work because other people are going to take your jobs away. That was a pretty cheap way of telling everyone the seriousness of the problem.

I think some other things that could be done—there are many conferences in which we have the States talk to each other about what works and get rid of the "not invented here" syndrome. Pick up what works in Michigan and Ohio and Arizona and California.

Down the road, I think tax credit has to be addressed and I agree that where I've looked at it there have always been problems. But I think the cost is going to be so great that industry isn't going to be able to do it by themselves, because you get into major costs, but the campaign is important because where it has failed a lot of times is because the owners of the industry didn't really believe in it. They really didn't believe in the value of developing that person. It's what I call the throw away system. And I think the first is just a campaign to make people aware of it, to share what works, and to work with the States to break down some of the barriers.

Representative SCHEUER. Mr. Wiggenhorn, your company spends about $40 million in worker training. Is that more or less right?

Mr. WIGGENHORN. That's right.

Representative SCHEUER. OK. How do your stockholders feel about it?

Mr. WIGGENHORN. Well, I have to present to our board of directors in February the answer to that question.

Representative SCHEUER. How does your board of directors feel about it?

Mr. WIGGENHORN. Well, what they ask is what return are we getting, so I have to track from different training we do what type of return we receive.

Our studies done by third party audits show that for every dollar we invest in training we get about a $30 to $33 return.

Representative SCHEUER. That's phenomenal.

Mr. WIGGENHORN. That's a pretty good return.

Representative SCHEUER. Does the rest of the panel agree with Mr. Power that when we institute Federal or State funded training programs we ought to compensate the trainers based on results and that providers should only be paid on the basis of results?

Mr. WIGGENHORN. A terrific idea.

Mr. CARNEVALE. I think in the case of public programs, that's fine. I think if we're talking about some sort of an incentive in the economic system to encourage more training, I'm less in favor of that.

For instance, when we built R&D tax subsidies and other kinds of capital depreciation allowances, we didn't put regulations and other kinds of stipulations in the law that said you had to buy the right machine and we're going to evaluate whether you did or did not and if you didn't we won't give you the subsidy.

The point of a larger investment subsidy is to encourage the activity. One assumes with cost-sharing that if I'm an employer and I pay 75 cents and you pay 25 cents, then I'm going to have some incentive to make sure at least that the training I'm doing is working.

I would add, also, that if you build the general investment subsidy, infrastructure will grow up around it. University professors and the Government and others will begin to evaluate best training practices and methods and the state of the art would improve.

I think the great risk in building an employer subsidy that had all sorts of evaluation and regulatory provisions attached to it is that it will indeed fail. If the device is too cumbersome, it won't be used. And I think, in many cases where these subsidies have not been used effectively, it's because they've been much too densely written and there's been too much evaluative criteria and stipulations attached to the law.

Mr. POWER. Mr. Chairman, may I just comment on the issue of resources and resource restraints?

Representative SCHEUER. Please do.

Mr. POWER. I want to be faintly heretical and suggest that there's plenty of money in the system to achieve what we need to do. If we quit splitting the system up between vocational education, adult education, job training, welfare training, on and on, there's a lot of cash flow in this system.

If we figure out how to drive the system coherently in response to policy and put it into a market focus, there's a lot of dough there.

The difficulty is the fact that we have individual separate programs which require you can't use the money except in certain ways. And I doubt, frankly, that the politics of either Washington or Michigan are going to allow us to wipe out a whole bunch of programs and achieve some kind of radical new world. So the choice is to manage those programs much better at the State and local level.

Once you start thinking about that in a human investment system that is transparent to the user, that works and reimburses people for outcome——

Representative SCHEUER. Just elaborate on what transparent to the user means, please.

Mr. POWER. Yes. Somebody comes in at the local level, they want to get job training. Well, are you part of title III of JTPA, or are you part of title II-b, or are you part of welfare training, or are you part of this or are you part of that? There are four or five different places where people get taken in or whatever it is. There are five or six different kinds of assessment systems. There are referral systems. But nowhere in the phone book does anybody say "Job Training."

What I'm suggesting is, it is not beyond the mind of the human being to figure out how to manage this system that is populated with a huge amount of cash flow.

In Michigan, we said, "My God, what are we going to do? We have more unemployed people than most States' population." We looked at JTPA, $125 million—not enough money. Then we did the inventory; $500 million cash flow per year in human investment activities in job training.

Representative SCHEUER. All of those programs you mentioned——

Mr. POWER. That isn't just Michigan. That's Massachusetts, Illinois, and on and on. We cannot achieve rationality in politics. We're never going to do it. But if you put it at the local level, you make it transparent to the user, and you get rid of these barriers between programs, and you start driving all this cash, you can get some outcome.

Representative SCHEUER. Driving all the cash how? By giving the customer the right to cause it rather than the provider?

Mr. POWER. Yes. Two ways, both having to do with identifying who's the customer. One, businesses. I don't know whether tax credits are going to work. Let's try them. Let's find out.

Second, individuals. We've got lots of legislation on the books that invests in individuals. Have the individual drive the program, have one place where a person comes into when they need human investment, one assessment system, one intake, one referral things, and by some device ignore the eligibility requirements in all of these laws and figure out how to parcel fund programs regardless of which progam it's from. There's enough distributive processing capability and software to do that at the local level and don't care who does it at the local level. Whatever works, works.

Representative SCHEUER. Anybody else?

Mr. CARNEVALE. Just one point. I think to a certain extent we're mixing populations here. That is, we have expended substantial amounts of money on dislocated workers in the past 4 to 5 years and notwithstanding an appropriations freeze we will expend still more this year.

We have expended at times—in 1976 we were up to about $12 to $13 billion on programs for the disadvantaged. There is a flaw in all that that I think ought to be mentioned here, although it's not the subject of our hearings. As somebody who participated in that legislative process and as a union official who participated at the other end and the public sector, the law is that when a person is out of work, the best thing you can do for him is get him a job.

We need to keep in mind that training does not create jobs, that in fact it's really the job that creates the need for training. Until you can identify or in fact secure the job and locate the training on the job for a dislocated worker or a disadvantaged person, to a certain extent what you're doing it, because you can't give them jobs, you're letting them eat training.

I think there is an irony here in the case of dislocated workers, and that is, we are going to be suffused with moneys for dislocated workers shortly. At the same time, we have very little money invested from the public side for employed persons and our investments on the part of the disadvantaged have declined enormously in the past 8 to 9 or 10 years. And I think one of the things is the investments are uneven at the moment and greatly so.

The other thing is that we're giving the most money to the cheapest population to serve. There are a lot fewer dislocated workers than disadvantaged and a lot fewer dislocated and disadvantaged workers than the other 90 percent of the population which is employed people.

Representative SCHEUER. Why couldn't we create a system, with the assistance of the computer, that would link three things—a worker with his present skills or lack of skills, a job 6 months or a year in the future, and training? Why couldn't we say to a worker in the Rust Belt, "There's a job for you in New York or California 6 months from now. Here are your skills. Here is what you're going to have to do in terms of polishing up your skills, improving your skills, adding to your skills. Here's a place you can do it. If you do it, that job is available to you in 6 months and it's going to pay you 25 or 50 percent more than what you're making now."

Is that not within our capability?

Mr. BENDICK. It is well within the capability not only of the data processing technology involved but within the administrative technology of running State employment services and running Job

Training Partnership Act programs. In fact, things like that are done in certain areas of the country where some of the most sophisticated systems are in operation.

The State of Missouri, for example, has an extra-ordinary computerized employment service which does a marvelous job of inventorying human resources and matching them against employer needs.

Frankly, the major constraint that has been on the expansion of those systems has been money. For years, the State employment services have been trying to get money out of the FUTA trust fund.

Representative SCHEUER. The what?

Mr. BENDICK. The Federal Unemployment Tax Act Trust Fund, which has a surplus of more than a billion dollars sitting in Washington. It is not being released because any expenditures out of that trust fund would count in terms of deficit increase, but the money is all there to modernize and develop a very sophisticated employment service around the country to do many of the things you're talking about, and it's being blocked.

Representative SCHEUER. Mr. Power just told us that there are all kinds of moneys out there and if only money were fungible, if only you could provide this transparency, so that an employer could look at all the funds from everywhere and do his thing and be able to draw on them, that there's really enough funding available to do that job.

Mr. POWER. Through the JTPA structure——

Representative SCHEUER. The what?

Mr. POWER. The JTPA.

Representative SCHEUER. Do you want to spell that out for the record?

Mr. POWER. The Job Training Partnership Act.

Representative SCHEUER. Right.

Mr. POWER. There are cases in which the local level, the employment service office, the employers, the job training people all work together and they talk to each other and that's fine. Back at some headquarters, people say, "We're not supposed to do that." And then they merrily go ahead and do it at the local level.

We are beginning to do a fair amount of thinking about how to do integrated activities of that sort at the local level. Our thought is that if you really count all the money in the system and you just drive it better, there's enough money to do that. The big capital cost will lie in management information systems and programming and that's a place where my guess is the Feds could get involved and they could try to develop some programming which could then be used and modified to meet local circumstances. If the Labor Department wanted to spend some money usefully, I'd sure like to see some programming to do that. It's complicated and expensive, but it's doable and it's portable technology.

Mr. WIGGENHORN. I think a good model right now on a very local level would be Pacific Bell, what they're trying to do, which is relate to and establish a bank of talent, to forecast what talent they're going to need, and to forecast to the individuals what types of skills they will need to pick up.

Representative SCHEUER. Well, that's exactly what I'm talking about.

Mr. **Wiggenhorn**. And they work well with the State institutions in making that happen. Those are the types of success stories I think we need to get across.

Mr. **Carnevale**. There are a couple of complications in this. We have talked about this for years now really and the computer capability is there absolutely. In fact, I think most of the software is there.

The New York State Center for research in this area has developed that capability fairly well.

There is a human impediment, however, and that is the economy is fairly diverse. If you're in the extractive economies, the oil economy of the West and the timber economy at the moment, there aren't enough jobs to go around. And if you turn up a job and you're a local job developer or an employment service person, you would be loathe to put that job on a computer system that made it available to somebody in New York. If you're short on jobs, you keep the jobs home.

So what tends to happen in these systems that cross boundaries is that they fill the jobs first and then they put them on the system, if you're short on jobs.

In economies such as that of New England where the labor markets are tight and there's a scarcity of people, the individual States and jurisdictions see some mutual benefit in these kinds of systems because you're in fact looking for people. You're not hoarding jobs or hiding jobs. You really need a system like that to find the kind of person that you want to hire.

Where labor markets are tight, these kinds of systems work absolutely fine. Where labor markets where there's high unemployment, there's a tendency for them not to work.

Representative **Scheuer**. How do we encourage more cooperation between the schools and the private sector? How do we encourage more involvement by the private sector in what the schools are doing to train kids, whether we're talking about vocational education which is flawed in many parts of the country or general education? How do we encourage the private sector? What are the things that private firms can do to enhance the education and training of workers? How should it be funded and how could it be structured?

Mr. **Power**. Get the private employers to define the skills they need for entry level positions in quality jobs and set that out as an agenda.

Representative **Scheuer**. As an agenda in the schools?

Mr. **Power**. As an agenda for the schools. Most schools are funded by property taxes. Large property taxes are paid by employers. Employers are being obliged to retrain people who supposedly have a basic skills vocabulary and inventory when they come into the labor force, and they don't.

Mr. **Bendick**. I think there's been a tendency to spend a lot of publicity and attention on ways to link schools and the local school system and local employers. I think actually there is fairly limited scope for that sort of linkage.

It's pretty clear what employers need from schools. They need, above all else, people entering the labor force with basic skills that make them trainable so that the employers themselves can provide the very specific job skills that will be required to perform on the job. Basic skills and vocational detailed skills are complementary to each other. You can't provide those specific vocational skills unless people have the basic learning capability already in place.

I think you would save a lot of time and effort by separating those two chores very neatly. Just have the schools focus on basic skills, get them out of the vocational training business in general, and keep employers from being pestered with being responsible for the schools doing the schools' own job.

Representative SCHEUER. We've got a great big vocational education establishment out there. What are you going to do about them? Drop them in the middle of a big black hole?

Mr. BENDICK. I think there are ways in which the vocational education system can be evolved to make it more functional. For example, a lot of the secondary school vocational education can be oriented toward providing more basic skills within the vocational classrooms. Second, you can shift more of the specific vocational training from the secondary to the postsecondary level. There are ways you can shape up the system.

Mr. CARNEVALE. I would take a slightly different tack. That is, the sorts of things that Marc is talking about are things that we can do and I might add very quickly that when one thinks about appropriate kinds of schooling—that is, schooling that is done in an applied or a functional context—whether or not the vocational education system does that well, at least that model is the vocational education model, so they have something to teach the rest of the schools.

My second point, I think where I would come out on this is the way to provide a linkage between the economy and schools is to make learning more important in the economy. And you do that by building a learning system in the economy itself so that it mattered what one knew in terms of one's compensation, in terms of one's job prospects and so on. When young people know that it matters how well they can learn in order to progress on the job, if they know they are going to move into an employer institution where knowledge is of some consequence, where they will need to be trained and the training will somehow affect their prospects and career development in that institution, then you will have made a fairly fundamental and profound linkage between the economy and its employers and the school system.

That's what we don't have. We have no learning structure in the workplace that connects to the schools. There is not a large body, for instance, of corresponding professionals, apart from our own members like Bill Wiggenhorn, who do this as a professional matter, who can talk to educators about how one teaches, what one teaches, who has the same professional background or a similar one to the educator.

The linkage between schools and employers usually occurs at a dinner at yearend when the CEO's and the local community come together and congratulate the schools on a job well done or serve on local committees. It's generally a political connection.

The difficulty is that our system, our economic system, does not value learning as part of its bottom line. That is the basic difficulty I think in that relationship.

Representative SCHEUER. Ms. Medved, did you have a comment you wanted to make a minute or two ago?

Ms. MEDVED. Yes. Actually, it was relating to the designation of skills and the identification of shortages.

In Canada, there's a system that we call COPS. It's the Canadian Occupational Projection System, and it's precisely that—it's onstream data and this is shared nationally. I understand why it may not be as applicable in the States because we have a Federal system of employment placement and counseling, but it seems that it could work if that national networking is done. I appreciate that a local labor market would hold more to their own, but if there is a sharing and there's a recognition that there can be a gain in another time from another position by the networking of such a data system, then I think it could work.

The other comment that I wanted to make also is, when you're talking about the cost efficiency of training, we have moved to a local basis. We used to have what were considered 33 programs and we capsulated them into 6. There are still 33 elements. We used to have 33 specialists to deliver these. Now we have one that knows all of them and that person is at the local level.

It's 2 years old. It's what we're calling the Canadian Jobs Strategy. It's this kind of thrust. In only 2 years we think we see improvement in service. We see an improvement in the effectiveness of where the funds are going, and so forth.

But the main thing seems to be that, which has already been pointed out I think here as well, is that you've got to find a way to stimulate the private sector. You've got to get the employer involved and interested and recognizing the value of the training to his company.

Representative SCHEUER. Well, this has been a marvelous panel and I very much appreciate your testimony. It's been thoughtful and stimulating and we are very grateful to you. Thank you very much.

[Whereupon, at 12:10 p.m., the subcommittee adjourned, subject to the call of the Chair.]

COMPETITIVENESS AND THE QUALITY OF THE AMERICAN WORK FORCE

TUESDAY, NOVEMBER 10, 1987

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON EDUCATION AND HEALTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 3259, Rayburn House Office Building, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Present: Representatives Scheuer and Hawkins.

Also present: Deborah Matz and Dayna Hutchings, professional staff members.

Representative SCHEUER. Good morning. I am pleased to welcome our witnesses to the 7th day of hearings in this series of hearings on "Competitiveness and the Quality of the American Work Force." Today's hearing will explore the question of attitude and behavior as a factor in the problem of large scale and massive failure at school, of the extraordinarily high rates of dropouts and the failure of young people to acquire the skills that the marketplace expects.

We have an extraordinary list of witnesses today, and I would ask them to come to the table.

Mr. Carl Holman, Ms. Signithia Fordham, Mr. Irving Hamer, Mrs. Bettye Topps, and Ms. Sonia Hernandez.

We have a couple of witnesses who have taken the 8 o'clock shuttle that was expected at 9 o'clock.

We are being joined by the distinguished chairman of the Education and Labor Committee, Congressman Gus Hawkins. We are delighted to have you up here, Gus.

Representative HAWKINS. Thank you for the introduction, Congressman Scheuer.

Representative SCHEUER. We'll keep this very informal, and Congressman Hawkins and I may interject with a question from time to time, and we will take the first three witnesses now and perhaps we will be joined by Mr. Hamer and Ms. Hernandez.

Two of you are scholars, and one of you is a practitioner. We thought we would divide into two panels—the scholars and the practitioners.

We are delighted to have all of you here today.

Mr. Carl Holman is president of the National Urban Coalition. He is a member of the Task Force on Women, Minorities and the Handicapped in Science and Technology, vice president of the

Black Leadership Forum and vice president for Public Policy of the National Leadership Roundtable.

Ms. Signithia Fordham is assistant professor of anthropology at the University of the District of Columbia and her dissertation on black adolescent school achievement patterns, especially how and why some black students achieve school success and why some don't, was what attracted us to her.

Ms. Topps is principal of the William McKinley High School of Washington, DC, and has been there since 1982. She is a member of the National Association of Secondary School Principals and president of the board of Senior High School Principals.

Congressman Hawkins, did you have an opening statement?

Representative HAWKINS. No. I would like to listen to the witnesses.

Representative SCHEUER. All right. Well, I would ask unanimous consent that my written opening statement be placed in the record at this point.

There being no objection, so ordered.

[The written opening statement of Representative Scheuer follows:]

OPENING STATEMENT
CONGRESSMAN JAMES SCHEUER
NOVEMBER 10, 1987

I am please to welcome our witnesses to the seventh day in our series of hearings on "Competitiveness and the Quality of the Workforce". Today's hearing, which will explore the question of how to prevent high school drop-outs, is, in fact, the cornerstone of the entire set of hearings.

For two months now, we have been receiving testimony--excellent testimony from recognized experts in their fields--about the relationship between education and jobs, how to improve our educational system, how best to train workers and how other countries meet a similar challenge. However, all of this information is seemingly irrelevant to a large segment of our populace--those who are uneducated by virtue of their having dropped out of school.

School drop-outs are not confined to any one racial or ethnic group and the statistics for the nation as a whole are alarming. Nationally, about 25% of all students drop out before completing high school. This rate increases to 40% for Blacks and 50% for Hispanics. A recent study indicated that minority student dropouts in New York State have reached "epidemic" proportions, ranging as high as 62% for Hispanic and 53% for Black students compared to 34% for the entire state.

While I am concerned about these alarming statistics generally, I am deeply troubled by the statistics for minorities and what this means for an entire generation of Black and Hispanic youth. These youths, for the most part, will be unemployable for all but the most menial jobs. Particularly in this age of advanced technology and jobs that require not merely knowing the basics, but being able to think and process information quickly, these students are dooming themselves to lives of poverty and crime.

I am especially concerned about the reasons for these high minority drop-out rates and what can be done to reverse them. There are those who claim that for many Black students, academic success is viewed as selling out. Academic success is akin to being an Uncle Tom, playing a white game by white rules. There is nothing more troubling to me than the possibility that this notion may be accurate.

There are others who feel these students are the victims of generations of discrimination and poverty. They are the children of impoverished children who themselves never finished school or learned to read and write. This problem is particularly acute for Hispanic students whose parents do not speak English.

At our hearing on October 27, Sonia Hernandez, an elementary school principal from San Antonio, Texas, indicated that her school is 98% Hispanic, the community has an 88% illiteracy rate among its adult population and the drop-out rate is 55% among Hispanics--and this occurs at the sixth grade level. Her testimony was so compelling and her experience with these children so extensive that we invited Ms. Hernandez back and are pleased to have her with us today.

Both of the above situations present enormous, complex problems--different--but equally difficult to reverse. I am most anxious to hear from our witnesses today to learn why you believe minority drop-out rates are so high and, more importantly, what we can do about it.

Representative SCHEUER. We have heard from many experts about many aspects of the problem of achieving a competent, literate work force that can help us compete in global commerce and make us once again a successful player in international economic competition. We have heard a great deal about what the schools can do better; we have heard a few things about what parents can do better; we have heard about what principals and teachers can do better; we have heard about what the community can do better and what the corporate sector can do better. But in the background, there has been a continuing black cloud that indicates that no matter how much the system might improve, until you can get the kids to want to achieve, we're going to have a continuing problem. We've been getting this recurrent signal that part of the problem is kids' attitudes and behavior itself. This is a discrete, identifiable part of the problem that society hasn't addressed sufficiently.

So it is this particular component of the problem that we are here to address today, and we are delighted to have all of you.

All of your prepared statements will be printed in full in the record. So what I would suggest that you might want to do is just sit down and relax and assume that you are in our living room or we are in your living room and the coffee is out there. We'll get you some coffee, so the living room atmosphere will be real. And just chat with us. Don't believe you have to stick to your statement. Once we get started, as you testify, don't hesitate to refer to anything that you heard this morning from other witnesses, from Congressman Hawkins, or myself and just chat with us from the heart and tell us (*a*) what the problem is, as you see it, and (*b*) what we can do about it.

With those words, I want to thank you all for coming, and we will introduce Mr. Holman for 8 or 10 minutes of informal discussion, and Congressman Hawkins and I may interrupt from time to time, but what we will probably do is hear from all of you, and then we will have some questions.

It is a pleasure to welcome you here, Mr. Holman.

STATEMENT OF M. CARL HOLMAN, PRESIDENT, NATIONAL URBAN COALITION

Mr. HOLMAN. Thank you, Mr. Chairman. I am certain that Gus Hawkins will have a sense of déjà vu, since he has heard almost everything I may have to say more than enough.

I assure you that my remarks will be informal, indeed, because I think that I am probably the only member of the panel who was not aware of the fact that we were supposed to be focusing on the behavior and attitudes of children; however, I spent a great deal of time in my earlier, happier life as a teacher in colleges and universities and spent some very early part of my life teaching in what we call the lab high school.

For the past 7 years, I have spent a great deal of time with staff, going around the country, visiting classrooms, visiting neighborhoods, visiting churches, because we have been trying to get churches involved and libraries involved in the neighborhood and trying to get young people interested in education and getting them better prepared for the year 2000, which is fast coming upon us.

I would like to suggest that young people get their cues very, very often from three groups:

They get their cues from their peers, who are, for them, the No. 1 influence now, but it is still true that the second most important influence, according to the studies that have been taken, are parents and family; and the third most important influence, celebrities.

This isn't quite——

Representative **Scheuer**. The third most important is what?

Mr. **Holman**. Celebrities. So that ranges from musicians, singers, athletes, disc jockeys, and so forth.

Now one of the reasons that I think we are in the dilemma we currently are in is because supposedly you would be able to generate the response and the economic growth that the private sector and the public sector have not been too actively engaged in over the past few years. You would find yourself still, in the year 2000, with a work force, 40 percent or more of which will be black and Hispanic, many of them of college age, but not attending college.

And I think that, in part, before I talk about the students, I would like to talk about the adult strategies that have led us to this point. And I'm not speaking either/or, because one of the real problems we have had is an either/or approach. You can't say, for example, that it is too late for these youngsters, not yet of college age, to start worrying about how they are going to get into college without people saying, or you're saying you ought not to be spending money and time and energy on college. That is not so.

It is not adequate to say—and I taught some remedial English and even had the courage to teach some remedial math in my younger years.

It is not correct to say that remediation is without value. But the experience of the New York Telephone Co. some months ago could have been predicted. It is all but impossible to try to wait until these young people are juniors and seniors in high school to try to repair damage that was done from preschool, moving forward.

One of the reasons——

Representative **Scheuer**. Excuse me. You mentioned the telephone company experience.

Mr. **Holman**. Yes. The New York Telephone Co. and some other companies in New York had promised jobs—entry level jobs to young people, and they had given an exam after some pretty easy remediation had taken place, and they were shocked to find that less than—I think that something less than 30 percent of these young people qualified, in terms of the simple examination for these entry level jobs. That has led to the kind of things that Bill Woodside and others have been trying to do.

But, you see, the real problem is that if you look at studies done, the Japanese city, the Chinese city and the American city, over a 5-year period, looking at the students, they discovered some interesting things.

One was that the Chinese and Japanese youngsters, who didn't have a number of the other amenities in their lives that some of the American kids have, because the American city they chose was

Minneapolis, which is not exactly the same thing as rural Mississippi—and they found that in math and science, particularly math, American children began to fall behind the children from the cities chosen in China and Japan at kindergarten, and that the gap widened steadily thereafter. They found that the lowest achieving Chinese school and the lowest achieving Japanese school—one was tied with the highest achieving American school—the Japanese lowest achieving school, its students ranked higher.

They went further, though, and that's part of my point. They noticed that American parents would help their children from time to time with reading. They did not help them or attempt to help them very much with math, and they asked a question of the parents: "What makes for success in math?"

Almost to a person, the American parents said: "Ability."

Almost to a person, the Japanese and Chinese parents said: "Effort."

If you saw some months ago——

Representative SCHEUER. Ability versus effort?

Mr. HOLMAN. Effort. You see, we keep looking for magic. The notion is that you are born Einstein, you know, or otherwise not. I have a personal reference. My mother, when she and my father came out of Mississippi, came into an urban environment, in which it was still possible, with muscle power and that sort of thing, to get into the steelmills and make a pretty fair life. You can't do that any more. My mother did not have a high school education, but she stressed education and the importance of education for me.

In addition to that, when I was doing those extra credit projects in physics, she timed me on the exercises; she took an interest. She made it clear to me that it was an important thing to do.

So the kids pick up a good number of their values from us. In the so-called ghetto high schools—we didn't know it was a ghetto high school, because our teachers didn't let us know we were in the slum or ghetto. That is another aspect of what is important for education, but in the particular school region, it meant more to be an athlete, despite all our teachers striving, than to be an honor student. But I must say, thank God, we were not in a position that was recorded in the Washington Post not too long ago, in which the honor students are asked to rise. It's very funny, because that happened in my high school once. Without saying anything, the principal just asked all of us who were honor students to come up in the auditorium to the front of the stage. We were knee shaking, but we did, and our comrades applauded us.

These young people refused to stand because they had found themselves in a culture—some would call it a subculture—in which learning is not important. But they get their cues from somewhere, and one of the places they get their cues from is that if you are a ghetto kid who shows any athletic ability, you are going to be nurtured, and you are going to be worked with.

I notice that if you go to any elementary school or any middle school, and you look at the youngsters and if you are an athlete, you've got this great big letter, this big square they have, the cheers at the pep rallies and all the rest of that circle around you, and for the youngsters who show some ability in learning, it's not quite the same. We have been trying to enlist parents—and I point out that low-income parents have influence over their youngsters.

One of the problems we have is that many of these teenage young women, who have children, had miserable experiences in school themselves, have little faith in schools themselves, and they pass that on to the others, and that's why in the family learning centers, we try to bring that back in with young children and not only teaching family math and getting them interested, but also helping them to take family computer science, so that they can get a competency which will enable them to get a job, and therefore, the children will have a future.

The models that are set for so many of these young people are models which they pick up out of the neighborhood, and those models very often are the models of people who materially make it. That's because materially this society, TV tells them all the time, this is the kind of shoe you must wear because "Air" Jordan wears it; this is the kind of jacket you must have; this is the kind of fur; this is the kind of tie.

So that two things begin happening. They don't have those things themselves, and so valuable are those things, that young people kill for their jackets or whatever.

But in addition to that, they look in the neighborhood, and the people who they see that are well dressed and actually driving big cars are people who are part of the subculture.

Now I think that in terms of what we are seeing, we go into a classroom in New Haven, CT, a school which is across the street from a city dump, that in itself kind of tells the kids something. But miraculously, now because of what Jim Comer and some others have done, those kids have achieved above and beyond some kids from the so-called more advantaged schools. And they are achieving, in part, because people have over and beyond the school day attempted to get into their homes, get with their families, bring their families into the school at a time when families can come and not just when the others can come, and they build high expectations. One of the principals said to me, "We spend a lot of our time trying not to let these kinds know that they are supposed to be poor, dumber, unable to achieve."

I think that if you can have peers that will influence the kids and especially the young children, it is difficult to do that. We have been using slightly older youngsters, that is, very often you will find that the youngster in high school, though he may not be doing extraordinarily well in school himself, if he tutors in these after-school classes and weekend classes, if he tutors the younger children, the younger children do better, and strangely enough, this kid goes back to his middle school or high school, and he does better.

We have got to get the kind of campaign, in terms of rewarding certain kinds of behavior and undergirding certain kinds of values which will make it possible by the year 2000 for us to have those 40 percent of youngsters and the others who are not in that category actually in school, actually achieving, rather than being a part of the statistics that we see now, in terms of crime, violence and disintegration.

Thank you, Mr. Chairman.

Representative SCHEUER. Thank you very, very much, Mr. Holman, for your penetrating remarks.

[The prepared statement of Mr. Holman follows:]

PREPARED STATEMENT OF M. CARL HOLMAN

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Let me commend you for organizing this series of hearings on "Competitiveness and the Quality of the American Workforce". As we rush headlong to the 21st Century, I can think of no issue that demands our immediate attention more than that which you have been exploring and which we are discussing today. I am grateful for the opportunity to take part.

Needless to say, America's future will be dismal indeed unless the private and public sectors prove much more effective than they are now in generating jobs and economic growth over the next two decades. Even assuming, as we must, that every effort will be expended to achieve this goal, it will mean little if we do not also treble our efforts to produce a workforce and a citizenry capable of making maximum use of the opportunities generated.

For the past several years, I have criss-crossed the country on behalf of the National Urban Coalition, sounding an alert on our need to prepare disadvantaged city children for a future far brighter than their present. Consider these numbers, which unfortunately seem not to be shaping educational policies and practices today:

o by 1995 -- about two election cycles from today -- Blacks and Hispanics will constitute nearly 40 percent of the country's college-age cadre;

o by the year 2000, there will be three workers for every Social Security recipient, and at least one of those three workers will be from a minority group;

o by the year 2000, manufacturing jobs will continue to shrink from 28 percent today to 11 percent in that not-distant tomorrow--manufacturing jobs replaced increasingly by ones requiring math, science and computer skills;

o according to the Department of Education, nearly one million students drop out of high school each year; in some urban areas, where the Black and Hispanic youngsters on whom our economy will increasingly depend are concentrated, the dropout rate approaches 50 percent.

The Committee for Economic Development, in its report Children in Need: Investment Strategies for the Educationally Disadvantaged, estimates that allowing present dropout trends and rate of underskilled graduates to continue in combination with the demographic trends I have noted will result in a shortage of more than 23 million Americans willing and able to work by the end of this century. I needn't add that we as a nation would then find ourselves faced with the greatest employment, political and social crises in our history.

Today you are looking for ways to prevent high school dropouts. I offer a seemingly simple start: **DON'T WAIT UNTIL THEY FAIL.** For those tens of thousands of students who are often referred to as "at risk", the current focus on remediation at the secondary-school level will come too late.

The young girls and boys who entered kindergarten earlier this year should be members of the high school graduating class of 2000. Unless things change drastically, the persistent shortfall in access and achievement in science and math literacy and writing proficiency for youngsters most at risk in the Class of 2000 will not appreciably diminish -- and may grow worse.

As former Secretary of Labor Bill Brock has said: "jobs that are being created in this fast-changing, post-industrial, information-based, communications-based, technology-based society are going to require cognitive skills, reasoning skills, mathematics skills and communications skills. During the next 13 years, in fact, jobs requiring four years of college are going to increase 45 percent - three times the rate of increase for all jobs put together."

If the current underrepresentation of minority and female students in the math and sciences continues into the near future, we will have an extremely difficult time filling those jobs Secretary Brock has described. In 1984, Blacks comprised 2.3 percent of the science and engineering workforce, but 10.4 percent of the general workforce while Hispanics constituted 2.2 percent of the country's scientists and engineers but 5.5 percent of the workforce. Females, in 1983, accounted for only 13.1 percent of the scientists and engineers. Unfortunately, many Black, Hispanic and female students are filtered out of the pipeline to science or technology related careers because of their limited pre-college experience in mathematics and science.

This filtering out manifests itself in both achievement scores and SAT results. While both are imperfect measures, they do give some guidance to the sort of dilemma we face. For instance, despite steady increases in both relative and absolute SAT mathematics scores by Black students in the ten years since scores have been reported by racial group, Blacks still lag well the scores of their White counterparts. In 1984, there was a gap of more than 100 points between the mathematics scores of White students and those of Blacks on the SAT. A similar situation occurs in the National Assessment of Education Progress tests, where the Black/White mathematics achievement score differential widens as students progress from elementary school to middle school to high school.

The filtering out of minority students from science and math curricula and careers will not only affect our ability to meet the increased job market demand for skills we normally associate with a "high-tech" economy but also some positions to which we probably give little thought. For example, as our population ages, which it is surely doing, we will face an increased need for people in the health professions and subprofessions. Virtually all of these require a solid grounding in science -- a grounding too few minorities are receiving. After a brief upsurge in enrollment by minorities in the health fields in the 1960s and early 1970s -- coming in large measure because of the concerted effort of public, private and non-profit sectors -- there has been a precipitous decline in the number of minority students entering medical school and other health careers.

So I think it is clear that a fire bell is ringing in the night. Unless it is heeded now, there will be even fewer students among those

40 percent of the college-aged cadre who will be Black and Hispanic in the middle of the next decade who will make their way through the elementary and secondary schools and emerge with the skill required to make them productive participants in the economic life of the nation--whether they go on to college or qualify for the entry level jobs of the future. We are not only facing the problem of how to prevent drop-outs, but an equally serious problem of how to assure that many inner-city, minority students who do make it to graduation day don't end up with diplomas which fail to qualify them for the opportunities that exist.

The math, science and technological skills needed by our workers in an increasingly competitive international economy are acquired through a cumulative process: students master basic skills at the elementary school level before they progress to secondary school and to college. Competence and confidence in math and science must be built step by step -- a process from which too many minority and female students have been excluded.

Currently, Blacks and Hispanics in the early grades are taking fewer of the basic courses necessary for developing the skills, study habits, and content knowledge required to excel in science, math and technology in the intermediate, high school and college years. To make matters worse, their enrollment in college is declining, in part because of cutbacks in federal aid.

We know that Black and Hispanic children are closest to their white age peers in the their earliest years and that, given half a chance, these children are eager and responsive learners. But we also know that the learning gap widens in every year after kindergarten -- indeed, math and science achievement levels of minority students take an alarming drop at the fourth grade level. By almost every measure, the roots of failure take hold long before thousands of minority youngsters have dropped out or been pushed out of high school -- or emerge with virtually worthless certificates or diplomas.

That is why our first order of business is to ensure that enriched learning experiences in math and science begin in preschool and continue at every level through high school for these students we refer to as "at-risk".

But a late start in studying science and math is but one factor that has contributed to the underrepresentation of minorities in these fields. Lack of opportunity for parental involvement is another. There is already strong proof that seriously involving low-income parents -- as well as the communities and institutions of which they are a part -- in genuine partnerships with schools can have strong, positive effects on the motivation and learning of their children.

Likewise, everyone needs a hero, a personal role model who can set the example and let a youngster know that it is possible for him or her to achieve -- and perhaps none need role models more than young Black and Hispanic children in our inner cities. We need more people like Black astronaut Frederick Drew Gregory to help alter the peer culture that in too many instances influences poor minority students to place a low priority on learning and the attendant values that support it.

And we must find ways to support and expand the efforts of a new breed of enlightened urban school superintendents and principals in using the resources of school staffs, students, parents, and business and community leaders to produce not only hard won changes in attitudes and perceptions, but also solid, measurable improvements in achievement.

Expectations that students can and will succeed are, in and of themselves, important ingredients of success. We do no one a favor by setting low expectations.

Today, any visit to the typical elementary and middle school, to say nothing of high schools, in low-income and rural communities will make it abundantly clear that for all the talk about education reform and expanded resources, we have a terribly long way to go in an awfully short time period if we are to provide these students who will be college-aged young adults in the Year 2000 with the kind of education they should have.

Whether one looks at facilities and equipment, teacher/pupil ratios, parental involvement, or kinds of content and types of expectations provided for these young people, it is clear that we are neither facing up to the nation's needs on terms of its competitive economic position nor the basic requirements for producing a democratic citizenry equipped to help make the decisions that will have to be made a generation from now.

Let's just focus on the issue of facilities and equipment for a moment. It's extremely difficult to teach hands-on science without lab equipment, to foster computer literacy without computers or conduct interesting and challenging math classes without proper materials. Yet this is the situation in which too many pre-school, elementary and high school teachers responsible for educating the "at-risk" student find themselves. Upgrading facilities, equipment and materials -- especially in the critical early years -- is an area into which the federal government could move quickly and effectively.

We at the National Urban Coalition do not pretend that improving the educational and long-term employment opportunities of those who are today "at-risk" is a problem for government alone to solve. That is why, for the past several years we have organized partnerships which mobilize minority parents and communities, school systems, businesses and concerned citizens from all walks in our SAY YES to a Youngster's Future^{tm} program. Through family learning centers, family math programs, school-based science and math programs and through advocacy, we are providing interesting and challenging introductions to the principles and operations of math and science and computer technology to minority youngsters -- and involving parents in the process.

But we obviously cannot do it alone, either. The national stake is high, the national response must be appropriate. There are some promising signs from the Congress in such measures as H.R. 5, the "School Improvement Act" passed by the House; in S. 406, the "Education for a Competitive America Act" reported favorably by the Senate Committee on Labor and Human Resources; and S. 1157, the "Family-Schools Partnership Act" introduced by Senator Bradley. However, these and similar pieces of legislation do suffer, in our view, by an overemphasis on talented and gifted students in science, math and technology at the expense of targeting resources at an early age to those students most in need of them. Early intervention in the education of "at-risk" students is a principle that we hope suffuses the federal response to heading off the crisis we may soon face in the quality of our workforce.

But, the National Urban Coalition and our 40 affiliates around the country are deeply concerned that the looming economic crisis -- and especially the crisis of the federal budget deficit -- will doom even these beginning efforts before they take hold. That is why we strongly urge the Administration and the Congress to set aside partisanship and personal preferences as you address the current economic crisis.

We believe it is possible to move decisively while also displaying the kind of political courage and vision that will bolster the confidence of the American people and the rest of the world.

What neither America nor the rest of the world can afford at this point is vacillation, politics as usual, or the kind of short-term policies and practices by government and the private sector that helped bring about the current unhappy situation.

We are sure you will agree that band-aid compromises will only mean much more pain in the future. We do not assume that the budget cuts and tax increases you finally arrive at will leave any group of Americans totally unscathed. Many of the country's most disadvantaged people have already endured considerable hardships because of previous budget cuts.

We would strongly suggest that you do everything in your power to assure that the decisions you make reflect two exceedingly important concerns:

- protecting the capacity of the economy to create real jobs for our people over a longer term than the next few quarters; and
- guaranteeing America's capacity to educate and train tomorrow's workforce and citizenry--including the poor Black and Hispanic children who by the year 2000 will constitute over 40 percent of the cadre that must be prepared for college or for productive entry level jobs.

I have been told by some that the mis-education of poor young minority students does not affect them. It is understandable that people who have just lost bundles in the stock market, who are barely hanging on to rungs of the middle class or working class are hardly likely to be thinking now about the children of the poor, the underclass. Perhaps they are not thinking of future generations at all, or when they are, it is doubtless their own children and grandchildren they have any mind.

But I cannot emphasize strongly enough that there are other children who are inevitably part of the equation. Many of them are born -- and will be born -- into neighborhoods very different from your own. Many of them Black and Hispanic. Most of them likely to join the ranks of those children who are now the poorest single group in the nation. If you have thought of these children at all, you may be able to gather some notion of the probable pattern of their lives from what is now happening to too many of today's parents and siblings of those who will be young adults and teenagers in the 21st century.

Current wisdom is that there must be sizable additional cuts in the federal budget to reduce the deficit and reassure the markets. Should these cuts -- and concurrent public and private policy changes over the next several years -- strike especially hard at the educational and job opportunities of those other young adults and teenagers, the consequences will not fall upon them alone. The negative costs of poverty, dependency and social disorganization can only be avoided by exercising prudent judgement now.

We would all do well to remember -- even in these times of unusual stress -- that the future of the so-called underclass is not a matter of simple justice and compassion alone. Like it or not, their future and ours are intertwined. We must to take the time now to think very hard about that. And act accordingly.

Thank you.

Representative **Scheuer**. Congressman Hawkins, do you have any questions?

Representative **Hawkins**. No.

Representative **Scheuer**. Ms. Signithia Fordham. Ms. Fordham, as I mentioned before, is an assistant professor of anthropology at the University of the District of Columbia. We are very happy to have you here today.

Ms. Fordham, take 10 minutes and chat with us, informally, and then when Ms. Topps is finished, we'll have some questions for you all.

STATEMENT OF SIGNITHIA FORDHAM, ASSOCIATE PROFESSOR OF ANTHROPOLOGY, THE UNIVERSITY OF THE DISTRICT OF COLUMBIA, WASHINGTON, DC

Ms. **Fordham**. Thank you. I am happy to have the opportunity to share with you today some of my views regarding black students' school success, which are grounded in a 2-year study that I did within one high school in Washington, DC, which I have titled "Capital High."

I want to begin by noting that I am going to dismiss and disregard the claims that we should repair the black child, repair minority children, so they will perform better in school. I don't believe that that's the right approach.

Representative **Scheuer**. You say "repair?"

Ms. **Fordham**. Repair or to make him or her more acceptable in the school context, because something is wrong with him or her; that is, he or she is deficient in some way.

I am also going to reject the idea that we have to repair the parents, because the parents are inadequate, et cetera, et cetera.

Instead, I want to look at competition, as it is defined by and for black Americans, historically, culturally, and structurally. My analysis is grounded in my study and the findings emerging therefrom. The data obtained from that school suggest that peer group influences are very important, but they are not innately good or bad. They can be used to either enhance school performance or, if not structured by the school context or the organizational structure of the school, they will, as I found in my study, foster alienation and stress among those students who choose to seek academic excellence.

In fact, I argue that because of the structure of the school, because the school does not consider or take into consideration the collective ethos that operates in the black community, that is, the group ethos, what happens is, for those kids who seek to achieve school success—and the school context, by the way, rewards rugged individualism; that you have to be an individual; you have to be on your own; you have to be by yourself—they have got to make it on their own, because if they do not do that, the kids that I studied had to cope with what I call the burden of acting white.

By this, I mean they have to develop strategies to deal with the tensions that emerged in the school context. Essentially, my argument is that the larger society is implicated in the underachievement of minority children, particularly black children, because it refuses to take into consideration the historical, cultural, and structural factors which have made black people a people. By this I meant that as I point out in my prepared statement, the issue of peoplehood is larger than the nation of racial and/or ethnic groups. It is, in fact, the notion that a group has a collective identity, that they see themselves as uniquely and distinctly different from other social groups. And I note in a footnote in the prepared statement that I presented to the committee, this argument is developed by several anthropologists, and I identify some of them. And it—essentially what it means is that these people have developed an identity that is, in many ways, in opposition to that of the group that oppresses them. And that seems to be what is happening in the case of black people.

I talk about examples of groups that might be designated as peoples. Among them are, of course, the Jews in the world, the Yaqui, the Mojave. The research that is emerging suggests that these groups are peoples, because they have developed an identity that is, in many ways, in opposition to those peoples with whom they interact and who are seen as different from them.

It is against this background that I want to talk about my study. I decided to divide the presentation I am going to make into several components. First, however, I want to talk about a few of the salient findings emerging from the study. I will not talk about all of them, because you don't have time for that today. I also want to talk about how the study was done, and I want to talk about intervention examples, particularly, intervention examples for how the schools can adapt group-centered learning, so that the curriculum—to show how group-centered learning fosters achievement. I shall then offer some brief implications and conclusions for education.

The study, as I said, was a multiyear study. It was done in a school in Washington, DC. The first year of the study was devoted almost exclusively to gathering data from a small sample of students with whom I was able to share an academic year experience. I followed them wherever they went. I went to classes with them, and home with them; I interviewed their parents, their teachers; went to work with them and went to gym with them. Wherever they went, I went with them.

The second year of the study, I developed a research questionnaire. In the tradition of anthropology, it was developed in situ, that is, I was now able to ask appropriate questions, because I now knew what some of the questions should be. Prior to that, I didn't know. So I developed a 55-page, 201-item questionnaire to get at a larger segment of the student body, 600 students. I collected data through that particular vehicle.

Some of the salient findings emerging from my study suggest, in general, I argue, that there are structural limitations which cause the responses that I talk about. That is, the "fear of acting white-response; that because society does not adequately reward black Americans and their children for their abilities, for their skills, for their credentials, they respond—the students respond—by underachieving in the school context, and so you have a vicious cycle that is perpetuated.

I note five specific findings that I will share with you today which emerged from my study:

First, there were gender differences and female students tend to outperform male students. This is time primarily, I argue, because it is harder for the male student to give up his peer group, especially in a context where individualism or the individualistic ethos dominates, that is, rugged individualism, because black adolescents, like black adults, have come to realize that the way black people make changes in the society is through group efforts and not as individuals. Therefore, female students tend to be able to do better than the male students, because they are more willing to break rank with their peers.

Representative SCHEUER. Excuse me. Break ground?

Ms. FORDHAM. Break rank with their peers.

Representative SCHEUER. Girls are more willing to do that?

Ms. FORDHAM. Yes. Also, another finding which emerged from my study was that in order to perform in this context, given the rugged individualism which dominates in the school context, the kids who were high achievers had to develop what I call a raceless persona, that is, they tended to appear to be and act as if they were not black people, they were just people; they were without race. I identify this as a raceless persona, a necessary prerequisite for black kids to do well in school. They were rewarded for being "unblack."

Another finding which emerged from my study was a lack of knowledge of racial identity. That is, the young people didn't seem to know who they were. When asked: "Who am I?", they were unable to define that in terms of their racial heritage or the fact that they were of African descent.

A fourth finding was that there was a lack of a strong class identity. Most kids saw themselves as middle class and did not show strong affiliation with class differences; that is, they tended to highlight race more than they did class features.

A fifth finding was that there was a pattern of avoiding certain segments of the curriculum in the school. This behavior suggests that if the course were not required, the student would not take it. For example, I talk about English, and I do that with great reluctance because, unfortunately, most people have equated the notion of acting white with a refusal to speak standard English, and certainly acting white is far greater and larger than that. I want to emphasize that it is not just that the kids refuse to speak standard English. That is just one way of acting white.

This, of course, is not an exhaustive list of the findings emerging from my study, but I give you these five as a background for what I am going to talk to you about today.

In the next section of my prepared statement, I talk briefly about the culture or contextual context. In this section I argue that the explanation about black kids being unsuccessful in school was inadequate, when I began my research study, so I just thought I would try to find out how we could account for intragroup differences. That is, why is it that some black children are successful in school, while the masses of black children are not? And the major explanations offered by social scientists at that point, did not meet my expectations or my criteria for adequately explaining this phenomenon.

Mr. John Ogubu of the University of California wrote the book, "Minority Education and Caste." His theoretical formulation is that there is a job ceiling which exists in society, and this job ceiling for black people tends to minimize academic effort and tends to foster the kind of unusual achievement in the school context as currently appearing but it too was inadequate as an explanation because it did not focus on why some black kids are successful in school.

I sought to develop a theoretical argument which would speak to that issue, and I came up with the notion of an oppositional cultural identity and oppositional social identity; that is, these twin phenomena tend to make black people less willing to behave in some segment of life and in some segment of the school curriculum in ways which are similar to the ways white Americans might react to it. This is an evolved response, the result of having lived in a society in an oppressed state for more than 200 years. This oppositional culture frame—oppositional cultural and social identity—makes it very, very difficult for black kids to act in ways which are sanctioned by the school, that is, in some segments of the school curriculum, especially those segments that are considered the prerogative of white Americans.

Today I want to talk also about what I saw emerging from this oppositional cultural frame and the group's standard ethos; that is, black people are much more concerned about group advancement versus individual achievement, so that if the individual can do both of these things; that is, advance the cause of the group while he/she as an individual, achieves his/her personal goals that are sanctioned by the community; to be a rugged individual, however, is not.

And so today, I want to talk about two examples of what I have learned about group-centered learning. I think it is important to mention to you that I am on shaky ground, because I am an anthropologist; I'm not a curriculum specialist, and so forth. I'm none of those things. I am simply talking about what I have learned about intervention strategies which might be helpful in changing the kind of findings that I found in my study. I want to talk about Mr. Bill Green's work at Jordon Mott Junior High in the Bronx, NY, and I want to talk about another even more powerful example, Professor Uri Treisman's work at the University of California, Berkeley.

These examples of how collaborative studies, how forcing black kids to study in group changes their performance in school in massive ways are powerful. They are phenomenal. Mr. Green is the principal of a junior high school in New York and his children's scores have gone up phenomenally. The kids came from an elementary—two elementary schools, basically, in the Bronx, and they were ranked, according to Bishop's article, 593 on a scale of—there were 623 schools, so they were near the bottom.

When Green went to that school, he changed the way the kids—he changed the reward structure, the curriculum, and so, instead of each kid working alone, he forced them to work together. You have to work together in order to be successful, he argued. He divided the kids into teams, and the teams competed with each other in their own sections of the class, and/or they competed with different sections of the class. By making this change, he has moved the school to the top 11 percent of the schools in his particular school district, and they are now performing one grade level above the norm of what is expected of a junior high school student.

Professor Treisman has taught calculus. I mean, he has worked with students in the calculus component of the math classes at Berkeley, with kids who say they want to be math majors or in a profession that requires a math-based curriculum.

In summary, what I am trying to argue today is—to conclude, of course—I have gone too long—is that individual ability is minimized in these contexts. The kids are warned constantly in the Treisman's example, of the danger of working alone and studying alone. They are taught that you have to work together. They are forced to come to see each other as peers. So, self-realization efforts in service to the group are the key factors here for these young people.

I think what I have tried to point out——

Representative **Scheuer**. Excuse me, would you repeat that.

Ms. **Fordham**. Self-realization through personal efforts in service to the group is the key factor here; that is, if the children want to be successful, their own personal goals can be realized, but they must do it through the group. And in the program in which he has participated, the calculus student scores have gone up by one grade point. In fact, these kids perform better than their Asian counterparts, and that is revolutionary. It is phenomenal. And I am very pleased to see this is happening. But it is because they now use the group to foster achievement. They now use the group to say "we" can, as opposed to "I" can, and that is something that schooling in America does not seem to foster.

What I want to say to you today, in conclusion, is that ultimately we have to work to change the limitations that exist in this social system, and we have to change the way black children respond to school achievement. School success is phenomenal when it is phrased in an individualistic mode. I have argued the importance of the historical factors which have made black people who they are, and I have argued that history is more powerful than policy.

So, if the Joint Economic Committee wants to make policy today, they have to realize that policy issues have to take into consideration cultural, historical, and structural limitations of our society, and that peer group forces may be either bad or good, but they are a phenomenon that exists, and what we have to do is, we have to make it so that it works to the advantage of black kids.

So, collaborative learning is stressed, commitment and effort over ability.

I am weary of hearing about gifted and talented programs, particularly how they can separate the good from the bad. I think what we need to do is focus on how we can help kids achieve, given the group-centered ethos which exists in the black community. And of course, we have to eliminate the class barriers in our society.

Thank you.

Representative **Scheuer**. Thank you, Ms. Fordham.

[The prepared statement of Ms. Fordham follows:]

PREPARED STATEMENT OF SIGNITHIA FORDHAM

PROMOTING BLACK STUDENTS' SCHOOL SUCCESS: 'ACTING WHITE' BLACK AMERICAN STYLE

I. INTRODUCTION

I would like to begin my presentation today by expressing my gratitude to the Joint Economic Committee for inviting me to share with you some of my views regarding Black students' disproportionate failure to complete high school. I shall begin by promptly and summarily dismissing the widely repeated assertion that Black students' attitudes are the primary reason for their high dropout rate at the high school level. I also do not plan to engage in the usual analysis which dictates that we repair the Black child, making him or her both more acceptable to school officials and more willing to become an individual rather than a member of a social group.

As an anthropologist, I am concerned with the problems of school achievement and competition as they are historically and culturally defined for and by Black Americans. Also, I am interested in offering some suggestions for how schools might motivate Black students, as a group, to be competitive in school and subsequently in the work force of the nation. The suggestions I shall offer are based on findings emerging from (1) my recent multi-year study of how and why some Black adolescents seek academic excellence and (2) several school settings where Black students are taught to be dependent on their peers for academic support. More specifically, my intention is to offer an explanation for Black students' apparent resistance to one-on-one competition with members of other social groups as well as with other Black Americans in the school context. My argument is grounded in an analysis of the historical, structural and cultural factors unique to Black people. Essentially, I shall argue that the dominant group-centered ethos operating in the Black community can be subverted by the schools to enhance rather than weaken Black adolescents' willingness to seek school-sanctioned learning and skills. I shall also argue that Black Americans' inability to achieve equal status with their dominant-group counterparts, even when they clearly possess equitable skills and credentials, is at the base of this resistance and has had and continues to have a profoundly negative effect on their willingness to compete in arenas, including the school context, in which both an individualistic ethos and a perception that the context is defined as the prerogative of white Americans exist. Furthermore, I shall argue that, until we are willing to both make use of the group-centered ethos of Black adolescents to enhance academic learning in the school context and enlarge our definition of the opportunities available to Black people in the opportunity structure, an individualistic, competitive ethos as defined by the dominant society is unlikely to emerge on a broad scale in the Black community.

I shall begin my presentation by: (1) briefly describing how the study was done and how the various segments of the Capital Community responded to my presence; (2) outlining some of the major findings emerging from my multiyear study of Black adolescents' school achievement patterns; (3) presenting a brief historical context undergirding my research design and procedures; (4) offering some concrete examples of how school personnel's intervention in the existing practice of sanctioning competitive behaviors at the individual level has been influential in dramatically raising the achievement pattern of Black adolescents at the secondary and college level; and (5) offering some conclusions and implications presaged by these findings.

In general, I shall be arguing that ultimately the larger society, through its organizational structure and its unwillingness to affirm and validate Black Americans' identity and social structure, is implicated in the widespread unwillingness of Black and other nondominant-group children's reluctance to participate in the competitive ethos sanctioned and condoned in the school context and subsequently the adult work force. This practice, I shall argue, is strongly implicated in both the massive underachievement and the high dropout rate of Black students at the secondary school level. This is the case, I shall argue, because, as presently constructed, schools tend to reinforce rather than eliminate social distance between and among Black and white students, leading to a persistent unwillingness on the part of Black adolescents to cope with what I have described elsewhere as the "burden of 'acting white'". I shall briefly describe how and why the study was undertaken, including the research design and procedures.

II. HOW THE STUDY WAS DONE

For several years, the local newspapers, including The Washington Post, have noted (1) the lower academic performance of Black teens in the District of Columbia on the annually administered standardized tests, including the SAT (see Feinberg 1982:B1; White 1983:A1) and (2) their lower graduation rate of all the school jurisdictions in the Washington, D.C., area (Feinberg 1984: B4; see also "D.C. Schools: Moving Up", The Washington Post, 1982). These reports consistently noted that Black students in the lower grades perform at or much closer to the national norm on standardized measures of school success than their older peers. This locally reported disparity in academic achievement among Black students is reported in the research literature as well. Hence, it was against this background that I sought to obtain access to a high school in the District of Columbia Public Schools.

Obtaining permission from the D.C. Public Schools to complete an anthropological study was a long, complicated process, which in addition to the official and formal submission of a request to do research in the system, involved negotiations which included the implicit and sometimes explicit use of my native status; contacting personal friends and colleagues whose network of friends included high-level officials in the D.C. Public Schools; and, finally, interviewing the principals of Capital High School[1] and several other schools via the telephone and in person. Ultimately, permission was granted and I was allowed to officially enter Capital High as an ethnographer during the beginning of the fall semester 1982.

I chose Capital High School as the research site for several reasons, including: (1) it has a high concentration of high- and underachieving eleventh grade students; (2) it is located in a historically Black quadrant of the city and therefore serves a predominantly Black student population; (3) while its clientele is drawn primarily from the surrounding community, it also attracts students from other neighborhoods in the city;[2] (4) a review of the standardized test scores for the city showed that the students had consistently scored below the national norms for the past several years; and (5) when I interviewed the principal of the school, he was extremely supportive of the goals of the study and assured me that his faculty and staff would also be supportive.

Establishing rapport with the people in the Capital High community and school was not as difficult as I had anticipated, but it was also mixed and uneven. This uneven reception forced me to adopt a variety of strategies when interacting with them. For those who saw me as a native, the adaptation was easier and less energy-dissipating. On the other hand, when interacting with those persons who viewed me primarily as a researcher and hence a stranger, the adaptation was more difficult and costly, and my adaptation was frequently characterized by gaffes, blunders and faux pas which tended to widen rather than narrow the existing social distance.

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[1] The name of the school and all other proper names are pseudonyms designed to protect the identity of the people who so graciously allowed me to intrude into their lives.

[2] At the high school level, students in the DCPS are able to attend any of the existing high schools. This was not always the case; however, at the time I did this study, this was and remains school policy at the high school level.

Establishing rapport with the school's counselors was characterized by some "selective freezeouts" (Johnson 1975), with the freezeouts being more characteristic of the male rather than the female counselors. The classroom teachers' acceptance and response to my presence and identification as a researcher was much more varied and complex. Many of them did not fully understand how anthropological studies differed from those of psychologists and educators. Still others displayed enormous indifference, indicating a general disbelief in the efficacy of the proposed research and/or a belief that, as an anthropolo ist, I too was guilty of 'acting white'.

Unlike the various categories of adults discussed above who initially, generally, evaluated me by my visibility as a Black person, establishing rapport with the students was, in the beginning, dependent upon eliminating barriers associated with an emerged status--I was another adult. However, this was only a temporary evaluation. Once they knew I, too, was a student, they generally wanted to help me "get over". Those invited to participate in the study were generally flattered regardless of their academic record, and eagerly sought their parents' permission.

The criteria involved in selecting the student informants for the study were uncomplicated: 24 Black American eleventh-grade students, 12 high achievers and 12 underachievers, 6 of whom were male and 6 female in each of the two categories. As noted elsewhere, the initial sample group was comprised of 33 students, 9 more than I had originally sought. I modified my original research goals in order to accommodate the larger number of students and, at the same time, minimize the negative consequences of possible student attrition. The first step in the selection process involved asking the counselors to identify eleventh-grade students in both categories that they thought would be willing to participate in such an intrusive, time-consuming study, and whose parents would not disapprove. They did. Teachers were also asked to identify such students. I was given access to the cumulative folders of the eleventh-grade students at the school, enabling me to verify the claims of both the teachers and the counselors.

Those students who were doing well in school were anxious to tell me about how they had managed to do so against the odds. Similarly, the underachieving students desired to let me know what factors they thought were responsible for their diminished academic effort. Most of the underachieving students acknowledged (and I was able to confirm their claim) that they did much better in school when they were younger and, more importantly, that at this grade level they were putting forth very little effort to achieve academic excellence.

Data were gathered over a two-year period. During the first year of the study, ethnographic data were obtained from the 33 informants from formal and informal interviews, classroom observations, teacher and counselor interviews, interviews with their parents and other significant adults. Observations were made of the students during both school and nonschool time. These observations often took place at church, work sites, recreation centers, sports events and during informal interactions with friends. The second year of the study was devoted to the administration of a 55-page, 201-item research questionnaire to 600 members of the student body, covering all grade levels. While only a small portion of the data collected during the second year of the study has been analyzed, the trends emanating from this component of the study support many of the findings obtained from the smaller sample group during the first year of the study.

In general, while establishing rapport with the various segments of the research community was not very difficult, it was nonetheless mediated by the fact that I was seen as a native (i.e., a Black American), a stranger, an adult, and a female. Moreover, the role and/or status of the groups within the community was/were influential in determining how I, the researcher, even attempted rapport. In general, the various sectors of the school and community were receptive to my presence, and their reception of me was greatly influenced by my native status. Nonetheless, I think it is important to note that, while my native status was my entry card, it was mediated by the fact that I was also a member of a research community and that role--as researcher--would, as the research progressed, come to take precedence over all other statuses and roles I simultaneously occupied, making me more vulnerable to the charge of 'acting white'.

It is also important to point out here that, after the initial reception, my status was constantly renegotiated. Indeed, it was an ongoing process, subject to daily change with each informat at the research site. Sometimes adult informants who appeared extremely comfortable with me one day, and secure in the fact that I was a native whose intentions were honorable and designed to enhance Black students' academic effort, would be less certain the next day and less willing to see me as a "fictive kinsman". Indeed, on more than one occasion I was asked by a classroom teacher not to return for further classroom observations, because what I was doing, as she put it, was "for you [only]; you are not here to help Black people." Hence, in many instances I was vulnerable to the charge of 'acting white' and had to cope with its attendant burden. When I was seen as a researcher rather than a native, my informants invariably wore masks. In fact, because they often vacillated between these two extremes in assessing me, i.e., native and friend on the one hand and stranger and researcher on the other, I was continually anxious and uncertain about what to expect from them on a daily basis.

In summary, my experience as a native ethnographer at Capital High was similar in many ways to that of anthropologists in non-native settings, with the salient exception that I did not experience culture shock, at least not in the traditional meaning of that term. Instead, I was frequently forced to come to grips with Black Americans' perceptions of those group members who seek to cross established cultural boundaries and, more importantly, the negative sanctions associated with such behavior. Several findings emerging from the study are considered next.

III. SOME SALIENT FINDINGS

In general, the findings emerging from the study at Capital High suggest that one of the major problems confronting Black adolescents is the adverse effect of the *structural limitations* of the dominant society and its system of schooling on the hopes, dreams, aspirations and life chances of Black people in America. These conditions are influential in both the emergence and the continued existence of the oppositional social and cultural identity system embodied in what I call the fictive kinship system[3] found to exist at the school and in the community in which it is located. This is most clearly evident in the students' conscious and unconscious efforts to avoid the perception that their response to the school system is one which indicates that they are guilty of 'acting white'.[4] While this response--'fear of acting white'--is clearly visible in the students' behavior at the school, its development and persistence are attributable to the oppressive conditions confronting Black people i America. In other words, it is the unique historical, cultural and s ructural experience which Black Americans have lived through in this coun ry which (1) has been influential in their emergence as a people, and (2) is at the base of the responses of Black adolescents to the schooling pro ess in this country.

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[3] I hypothesized that the evolved social organization of Blacks in America tends to support group advancement and mobility over individual achievement and mobility. I employed the anthropological concept *fictive kinship* to describe the tendency in the Black community to emphasize group loyalty, boundary maintenance and a collective identity system, as well as the tendency to negatively sanction behaviors thought to be at variance with group symbols, cultural entities, etc., of the community (see Fordham 1982a, 1982b; Ogbu 1982,

Historically, Black A ericans were (and still are, to a lesser degree), systematically denied oppo tunities--in both the school and the larger social context--to compete with w ite Americans. Cultural aspects of what makes Black people different fro white people are central to the social organization which exists in the B ack community. Hence, a critical element of Black American culture--fictive inship--is embedded in its oppositional features--its oppositional social an cultural frames. Structurally, Black Americans'

1983a, 1983b). As operati nally defined in my research, fictive kinship refers to the boundary-mai taining behaviors symbolic of the collective identity system developed nd adopted by Black Americans, in response to their exclusion from the d minant group's status mobility system (see Ogbu 1978).

[4] As operationally def ned here, 'acting white' suggests the various strategies that Black stud nts use to resolve, successfully or unsuccessfully, the tension between students desiring to do well academically and meet the expectations of s hool authorities on the one hand and the demands of peers for confo mity to group-sanctioned attitudes and behaviors that validate Black identi y and cultural frame on the other (Fordham and Ogbu 1986).

confinement to a castelike status[5] in the existing larger social structure has had and continues to have a profound influence on their response to school and the schooling process. The effects of these factors--historical, cultural and structural--, I hypothesized, would negatively affect academic achievement. Additionally, I argued that those Black adolescents seeking to pursue academic excellence in the school context, utilizing the existing individualistic, competitive ethos, would experience enormous anxiety, stress, ambivalence, isolation and conflict. The hypothesis was supported.

The ethnographic findings emerging from my two-year study of Black students' school success[6] also validated the claim that for Black students, particularly those in the Capital High School study, achieving academic excellence is fraught with conflict, ambivalence and stress. This is true in large part because for many of the high-achieving students, the desire to remain bicultural mandates the development of strategies which camouflage their desire and efforts to achieve academic excellence. The school context, like the larger society, is characterized by an individualistic ethos in which the individual is urged to become an exception to the rule. This ethos conflicts with the group-centered social organization existing in the Black community. Moreover, the collective ethos in the Black community appears to be aimed at enhancing the status of the group rather than mere individuals within the group. Evidence of the claim that academic excellence among Black students at Capital High School is best characterized as being fraught with conflict, ambivalence and stress is indicated in the following specific findings emerging from the ethnographic component of the study:

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[5] According to Ogbu (1978), Black Americans share this status with other involuntarily incorporated Americans: Puerto Ricans, Mexican-Americans and Native Americans. Moreover, while a castelike status shares with the traditional Indian structure a focus on ascribed characteristics, it is not completely analogous (see Ogbu 1978).

[6] Some of the data, particularly the student data collected during the first year of the study, have been analyzed and reported in my dissertation completed at The American University, reports to the National Institute of Education and The Spencer Foundation, many papers presented at professional conferences and other meetings, and in two academic journals (Volume 18, No. 3, of *The Urban Review*, and a forthcoming issue of the *Harvard Educational Review* (Volume 58, No. 1, 1988).

(1) Gender is a major variable in academic achievement. Ironically, this finding indicates that it is the male students who are more adversely affected by gender in that they must develop a more diverse and complex set of strategies to hide their desire to achieve success as defined by the larger society, and that they are more vulnerable to charges of 'acting white'. Because fewer of them risk alienation from their peers and the acceptance this group offers, they underachieve in the school context to a much greater degree than their female counterparts. Moreover, a larger number of them develop strategies which indicate to their friends and peers that they are not primarily concerned with academic achievement. Among the strategies which are widely used by both male and female high achievers at the school are: (1) absenteeism and tardiness to school and class; (2) participation in sports and sports-related activities; (3) becoming a clown and/or a comedian; (4) becoming an invisible person; (5) feigning lack of knowledge and/or an unwillingness to pursue school-sanctioned knowledge in order to minimize a sense of isolation and loneliness; and (6) development of a raceless persona.

(2) The emergence of a raceless persona among the high-achieving students. This persona--racelessness (see Fordham 1988, Harvard Educational Review, Volume 58, No. 1)--appears to enhance one's school success potential. The raceless response on the part of the students who made up the high-achieving segment of the study was apparently directly influenced

by the organizational structure of the school. As noted above, this structure is one which supports an "ideology of distinctiveness", i.e., an individualistic rather than a group-centered ethos. This "distinctiveness ideology" is achieved by separating the high-achieving students from their less successful peers. Unfortunately, this system of tracking reproduces rather than eliminates the castelike structure existing in the society at large, primarily because it changes only the economic condition of the individual student but not the racial or ethnic group with which the student identifies, in this case Black Americans. Hence, racelessness becomes a viable option for individual social mobility in this context because the group is socially disvalued.

(3) A widespread lack of knowledge of racial and/or ethnic identity, and/or a denial of racial group membership, especially among the high-achieving students. This was best seen in the inability of the sample students to clearly articulate a response to the question: "Who am I?" Many of them denied being of African descent or admitted that denial was their general response until fairly recently. While this was less true among the underachieving students, it is, nonetheless, an apt description of most of the members of the student sample.

(4) The lack of a strong class-related identity. Interestingly, nearly all of the students--high-achieving and underachieving--identified themselves and their families as "middle class" regardless of their socioeconomic conditions or ascribed status. Not surprisingly, this response to class phenomena is clearly evident in the student-initiated activities, especially among the male students. Most class-related criteria are given only minimal attention. This situation changes drastically, however, when the social organization of the school interferes with the students' more natural inclination: discounting class-related differences.

(5) A patterned avoidance of selected segments of the school curriculum by most of the students at the school. Courses in the Advanced Placement and/or Gifted and Talented component of the school curriculum were generally avoided by the vast majority of the students for the following reasons: (1) they were perceived to be beyond their career and job expectations; (2) they were "protected" by the school administrators and counselors from the detrimental effects of failure and consequently the rewards of success; and (3) they lack the support of a peer group to buffer them from the accusations of "acting white". Not surprisingly, then, students opting to take these courses and participate in this component of the school curriculum were often accused of "acting white". While this accusation was frequently hurled at students who, for example, used the English language in ways sanctioned by the school, since all students were required to take four years of English instruction, avoidance of this component of the curriculum was not possible. However, were English not a required component of the school curriculum, it would have been avoided in ways which paralleled other "white" aspects of the curriculum.[7] While a greater number of the underachievers talked about their desire to get out of those required English classes,[8]

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[7] It is important to emphasize that, while almost unanimous agreement existed around the idea that speaking standard English is one way of "acting white", it was by no means the only indicator students used to accuse their peers of acting white. In fact, I have tried to point out in my public presentations and published analyses that acting white should not be equated only with speaking standard English. Unfortunately, far too many people still focus only on that component of my analysis.

[8] A more immediate reason for the students' almost unanimous dislike of English courses was their tendency to focus on the students' weaknesses rather than the strengths of their language usage (see my discussion of Treisman's approach to teaching Black students calculus at the University of California at Berkeley elsewhere in this presentation).

most of the two groups of students indicated a lack of high correlation between the number of Enlgish courses they were required to take and their perceived value, in their minds and in the minds of their teachers when evaluating them. Hence, all of the students were obviously affected by the notion of "acting white". It was the fear of "acting white", as well as the struggle to cope with the decision to participate in aspects of the school curriculum which are generally perceived to be outside the general purview of Black Americans, which negatively affected the academic achievement of all Black students at the school, especially the underachieving students.

This is not an exhaustive list of the findings emerging from the study; nevertheless, it does suggest some of the many ways Black adolescents at the school I studied cope with the conflict, stress and anxiety they experience around the issue of academic excellence as organizationally structured at Capital High. This conflict and stress appear to be rooted in the structural, cultural and historical conditions affecting Black Americans in this country.

V. THE CONCEPTUAL CONTEXT

In order to explain the unique problems in my study, I shall present a conceptual framework which was, incidentally, the basis of both my substantive study and my experience as a native researcher.

My objections regarding the major social science explanations of Black students' lower academic performance, i.e., the explanations based on genetics, evolution, institutional deficiency, cultural deprivation, etc. (see Baratz and Baratz 1970; Bereiter 1965; Bullock 1973; Coleman 1966; Cools 1924, 1926; Jensen 1973; Shockley 1970, 1972) generated my interest in studying how Black students maintain academic achievement at a senior high school in Washington, D.C., which I have called Capital High. None of the conventional explanations incorporated what I perceived to be an enormously important component of the complex factors responsible for the lower academic effort among Black American students at the high school level: group identity and boundary maintenance, or what I subsequently labeled, in the aggregate, the "burden of 'acting white'" (Fordham 1985; Fordham and Ogbu 1986).

Initially, I sought to build my explanation of Black adolescents' underachievement in the school context on Ogbu's (1978) cultural ecological model. Essentially, Ogbu theorized that the existence of a "job ceiling" or barriers in the opportunity structure affects Black students' perception of the careers and opportunities available to them and thereby negatively affects their academic effort. However, as I became more and more conscious of this theory's inability to explain intragroup differences in school success among Black students, I sought to modify it. Also, as it was originally constructed, Ogbu's theory focused almost exclusively on Black students' school failure. Since I was interested in determining what factors were or are influential in school success among Black adolescents, modification of his cultural ecological theory was necessary. Working with Professor Ogbu (see Fordham and Ogbu 1986), I was able to move beyond the original focus on instrumental exploitation (limitations in opportunity structure, such as "job ceilings") and instrumental responses, to examine the expressive dimension of the relationship between the dominant culture and the indigenous culture of Black Americans. More specifically, in studying the expressive dimension of Black-white relations in America, I was able to isolate two additional factors which are obviously implicated in the unique texture of Black-white relationships in America. These two factors--an oppositional collective or social identity and an oppositional cultural frame of reference (Fordham 1981, 1982a, 1985, 1986, forthcoming [1988]; Ogbu 1980, 1981, 1984) which I described as fictive kinship--enabled me to explain, to some extent, individual differences within the Black American population.

The modification of Ogbu's cultural ecological theory led me to the cross-cultural literature on dominant-nondominant relationships. What I found was that a group of anthropologists and other social scientists were studying the unique texture of relationships, including the conflicts and oppositional processes between such groups in both traditional and contemporary urban societies. Generally, these researchers argue that in such contexts, the conflicts and oppositional processes often lead the subordinate member of this dyad to develop oppositional social identities and oppositional cultural frames of reference, leading ultimately to what they unanimously identify as the emergence of a "people" or "peoplehood".[9]

I shall now turn to a discussion of two examples of how Black Americans' status as a people,with its attendant focus on an oppositional cultural frame, is implicitly recognized in the school context and used to enhance and improve Black students' academic effort and achievement. In each of the examples presented, the students' enhanced school performance is attributed to the fact that the organizational structure in place at the institution supports a group-centered approach to learning.

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[9] The emergence of a people or peoplehood is not to be equated with a racial or ethnic group. While a "people" may share with such groups the idea of distinctiveness, the designation as a people is much more inclusive and braoder in scope (see Castile and Kushner 1981; Spicer 1971, 1980). Indeed, it is the "unique" nature of the historical experiences to which a group attaches significant meaning, which enhances the possibility of its designation as a "people". This is possible, Spicer (1980) argues, because each human population has a "historical experience which no other group has undergone." For example, the Jews experienced the Holocaust; Black Americans experienced slavery. Even though a social group may share a human experience with another social group (e.g., other social groups have been enslaved at various times in the history of the world), no other social group has experienced the particular historical experience in the same way. Hence it is both the uniqueness of the historical heritage of a particular social group and the meaning it attaches to these common identity symbols which are influential in the group's emergence as "a people".

VI. INTERVENTION: A GROUP-CENTERED ETHOS LEARNING STYLE

The most salient finding emerging from my study supports the importance of group-sanctioned learning practices in the school achievement pattern of Black students. Unfortunately, the findings emerging from my study of how and why Black adolescents' achieve school success strongly suggest that the social organization of the school where the research was conducted does not use the strength of the collective orientation of Black people, including their children, in its efforts to raise Black students' academic performance. In contrast, examples of massive school achievement among Black students at both the precollege and college level indicate a strong correlation between widespread academic achievement and group-sanctioned learning. The following examples are intended to be illustrative of the claim made regarding group-sanctioned learning and school achievement among Black adolescents.

The results reported at the secondary and college levels by Mr. Green in New York and Professor Treisman at the University of California at Berkeley indicate how powerful a tool peer pressure can be for academic achievement among Black adolescents. First, a discussion of how Mr. Green used the dominance of the peer group to enhance academic learning in his school (Jordon Mott Junior High), changing the school's identity from one well below the norm on standards of academic achievement to one of the few schools where

Black students outperformed most of their peers in comparable schools in New York City.

Green has been able to raise substantially the school achievement pattern of students at Jordon Mott Junior High by organizing and implementing a collective or group-centered ethos in the classroom context. In short, the approach Green adopted at Mott Junior High supports "self-realization through personal effort in service to the group." This approach is not widely stressed in the American public school system but, as Green so astutely observes, it is the predominant ideal in the status mobility system within the Black community, at least among school-age children. Consequently, in order to raise the school achievement pattern of the students at the urban school where he is the principal, he defied the conventional wisdom which appears to be operating in the larger society: destruction of ligatures or social attachments to family and other subdivisions within the Black community in order to succeed. This individualistic approach to achievement tends to reward what Americans define as competitiveness rather than cooperation, ability rather than effort, subtly suggesting the importance of innate qualities and characteristics rather than motivation or learned behaviors.

According to Green, "You have to make the kid want to be good" (cited in Bishop 1986:43). In other words, schools have to build on Black students' culturally learned predisposition to seek "self-realization through personal effort in service to the group" in order to raise their level of interest in school as well as to motivate them to put forth greater effort. Mr. Green insists that the primary problem in getting Black students to put forth greater effort (it is patently clear that he believes that lack of effort is what is at the base of Black students' underachievement in the school context), is a willingness on the part of school officials, including classroom teachers, to get them to recognize students' achievement efforts and, secondly, displaying or empowering the students so that they can display what they learn in the school context.

In a recent article describing Green's work, one author makes the following assertion:

> . . . the student player is given rewards based on the performance of the class/team. . . . Each of Green's classes must earn a certain number of points academically before any of its members are allowed to even attend a basketball game much less compete in one. Class trips and parties are similarly earned on the basis of academic performance and attendance. . . . A complex master schedule is drawn up at the beginning of each term, pitting all of the classes in each grade against one another in good old head-to-head, in your face competition. Reading and math are the games, and the desk-to-desk combat is fierce. The won-lost results and the standings are posted and followed keenly (Bishop 1986:43).

Also, Bishop insists that Green probably would have been dismissed from his school were it not for the "astounding results achieved from this approach to learning at Mott Junior High School":

> His students were drawn from two ordinary [elementary] schools that are ranked near the bottom of the barrel (Nos. 574 and 614 out of 623 public schools) in reading skills. By the time his students leave (after eighth grade) they are reading a full grade above their own level, a reflection of Jordon Mott's impressive ranking--in the top 11% of all city public schools. That kind of performance helps explain the awards in Green's office: school-district trophies for outstanding academic achievement year after year, a certificate of appreciation from the parents' association; several plaques in recognition of the school's remarkable 90% attendance rate. There's not a piece of athletic memorabilia to be found anywhere (Bishop 1986:44).

Bishop's discussion of how Mr. Green was able to improve the academic performance of Black students at Jordon Mott Junior High School argues well for the importance of considering the cultural history of the students who are being taught. In fact, in a recent telephone interview with Mr. Green, he assured me that what I had read about his school was accurate: the students at Jordon Mott are outperforming students in schools similar to Mott in socioeconomic factors; they are also outperforming students in schools that are dissimilar in socioeconomic factors. He went on to tell me that his major problem is limiting the excitement of the students and their teachers. Each class is divided into four teams, with each team balanced for ability. What he is interested in fostering is motivation and effort on the part of the students so that they willingly pursue academic learning. He further indicated that, in an effort to promote "self-realization through personal effort in service to the group," students respond for the group and the child who just responded for the group is unable to respond again until all other members have had their turn to respond for the group. The group with the highest score is given the preannounced prize/award, recognition, etc. While this kind of incentive is limited primarily to math and reading, science and English classes also have a less well developed form of this program. The school staff is also looking to implement a similar incentive program in the social studies curriculum.

Mr. Green has been the principal at Mott for sixteen years. He remembers what the school was like when he arrived, and he is obviously pleased with what he has been able to do in terms of student achievement at the school. When asked why he decided to implement the program, he noted that it was primarily the result of his observations of the students on the playground at his school: the strong and weak play together in order to win. He just assumed that such a mixture--group effort, weak and strong--would also work in the classroom context. He was right. Arguing that this kind of approach is critically important in a neighborhood setting where students do not have a strong support system for academic achievement at home, he was proud to tell me that lack of parental support does not appear to be a critical element in his students' achievement efforts. Because pleasing their peers and winning for their assigned groups/classes are the critical elements undergirding their motivation, whether their parents are supportive or not is not a deterrent.[10] The students seek to do well because their peers are depending on them. Indeed, their ability to be the best at whatever activity or skill they are learning, is dependent upon each individual's mastery of the skills necessary to exceed the scores of their classmates who are not part of their group or, alternatively, in the case of classroom-to-classroom combat, exceed the performance of the other sections of their class. It is within the context of this need to succeed for the good of the group that individual aspirations are realized. Bishop's discussion of the changes in the school is limited to the changes in the way the students are taught, taking into consideration only the native or indigenous social organization of the children. In short, Mr. Green changed only one important aspect of the school: the reward structure of the curriculum. Specifically, he changed the way learning was organized and rewarded at the school, validating and affirming the cultural learnings of the children by making their individual achievement secondary to the advancement of the group.

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[10] Mr. Green appears to be defining parental support in the usual way: parents who attend school meetings and help their children with assigned homework, etc. Perhaps we need to rethink what it means for parents to be supportive of school achievement in the Black community, given its strong focus on pre-existing ligatures and the schools' dichotomous emphasis on individualism and a competitive ethos which undermines or, at the very least, discounts the importance of local ligatures.

A second, even more powerful, example comes from the Mathematics Department at ~~the Uni~~versity of California at Berkeley. Professor Uri Treisman is intervening in the lives of Black freshman students who indicate by taking calculus their desire to be involved in "name professions". He is currently reporting the results of an extensive six-year study of these students' response to group-centered learning. Treisman has the data to support his claims.

> Most of the students I interviewed in 1975 and 1976 did not succeed at the University [of California at Berkeley]. Among those who had come from predominantly minority, inner city high schools, there were valedictorians and leaders of church and youth groups, individuals who were the pride of their communities. Their decision to pursue advancement through schooling had placed them in the limelight, separating them from the majority of students around them. Their rejection of non-academic routes to advancement had been so clear, their reinforcement from both family and community for their decision to pursue an elite higher education so strong, that once at the University they felt there was no turning back (Treisman 1985:21).

Professor Treisman goes on to point out that these students did not lack academic motivation and high expectations from their home communities. Indeed, there was tremendous pressure to succeed. Nevertheless, most of these students failed the prerequisite math and science courses mandated by the University for those persons seeking careers in the natural sciences. Professor Treisman attributes their massive failure to: (1) a hostile environment--the University; (2) the lack of a supportive academically-focused peer group; and (3) an unwillingness on the part of these former high school high achievers to seek help when they needed it.

Treisman also notes that this failure rate was not limited to Black students who had come to Berkeley from inner city, urban school contexts. "Even for many [B]lack students who had attended academically reputable, predominantly white high schools," failure in the freshman year math and science courses was the rule rather than the exception.

> Even though these students were relatively well-prepared academically, the pace and intensity of competitive first-year mathematics and science courses coupled with the unexpected social isolation they encountered prevented many of them from getting their bearings or developing adequate study habits; thus, few did well in these courses (Treisman 1985:22).

In an effort to reverse this dismal retention rate, in 1976 the University of California at Berkeley developed the Professional Development Program (PDP) for minority students. PDP is a "faculty-sponsored honors program for minorities and women, designed, in the words of one of its founders, 'to produce a Nobel Prize winner'." The success of the program is bounded in its focus on the strengths of the students rather than an emphasis on remediation of their weaknesses. Hence, the students are taught to view PDP as an honors program, with success being dependent upon their willingness to collaborate with each other. This was the initial step necessary to change the achievement pattern of Black students at the University of California, Berkeley, who took science and math courses during their freshman year and expressed a desire to pursue a math-based career.

More importantly, Treisman's findings suggest that, when Black students are taught using a group-centered approach to school learning as the backdrop, their performance on school measures of success utilized in the Math Department at the University of California at Berkeley exceeds that of their Asian counterparts. This is revolutionary! However, this is not all. He also indicates that he is now transplanting this approach to the teaching of calculus to other universities, including Stanford and UCLA. He is also looking at how other practitioners at the high school level who are willing and able can use the cultural orientation of Black and other nondominant students to enhance the academic effort of such students at that level.[11]

Noting that Black students who are selected to attend the University of California at Berkeley are obviously among the best prepared in the country, Professor Treisman goes on to point out that at schools like UCB--predominantly white with a miniscule Black student population--Black high achievers, like the ones I studied at Capital High in Washington, D.C., come with a distorted sense of individualism and/or self-reliance as the way to make it in college. Indeed, in a recent conversation with Professor Treisman, he assured me that his observations and study of Black students at UCB over the past six years indicate that these very bright Black adolescents' sense of self-reliance has gone awry, leading to a stronger tendency on their part to work in isolation, especially among the male students, because they view this as the way to "make it". In short, his findings parallel the findings emerging from my study, in that the high achievers at Capital High worked alone, without the support and sanction of their peers. Indeed, as the high achievers at Capital High erroneously envision it, people who are successful in America achieve that status primarily because of some unique ability they have and, therefore, if they desire to duplicate this feat, they must demonstrate that they, too, possess unique skills or at least skills which are commonly shared with others like themselves but at a unique level. Hence, they become enamored with the notion of individualism and independence and working to prove that they are not dependent on someone else for their advancement. Because these students were generally the high achievers in their classes at the high school level, they had bought, wholesale, the individualistic ethos promulgated as the way to achieve school success in America. Consequently, it was difficult to convince them of the value of group-centered learning, of the value of depending on their peers for support and collaboration.

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[11] Many such programs already exist. For example, Professor Hymie Escalante at Garfield High School in East Los Angeles has been able to teach poor Hispanic students calculus so effectively that in 1982, their phenomenal performance on the ETS exam they took led to questions by ETS and the decision to make the students retake the exam. They were accused of cheating to earn the scores they made. In their second effort, they were vindicated. Professor Escalante's efforts are widely recognized and have recently been documented in a film called "Walking on Water," funded by the Ford Foundation.

However, at a predominantly white institution like UCB, Professor Treisman found that this approach to schooling and achievement was disfunctional for Black high achievers. Their unwillingness to seek support from either their white peers, whom many of them did not trust, or their Black peers, with whom they socialized but with whom they did not study, was disastrous in terms of academic achievement.

Essentially, what each of the examples discussed here suggests is the impact and power of the group-centered ethos in Black students' school performance, with the group being the most important variable in both academic excellence and in underachievement as noted in my findings. Unfortunately, the students at Capital did not have the benefit of an organizational structure in place at the school which sanctioned, yea, even mandated a collective ethos in academic evaluation and assessment. Like most schools in the United States, students at Capital were pitted one-on-one against each other. The result is that only a small number of them are successful. This undesired pattern is repeated on a yearly basis, school administrators' self-flagellations to the contrary notwithstanding.

In summary, these two examples support my research findings, differing only in the results. At the precollegiate level, findings emerging from Capital High suggest that the organizational structure of the school fostered disaffailiation with the peer group and by extension the Black community. In fact, school success at Capital High appears to mandate a kind of estrangement from the peer group and the support and identification it offers. Not surprisingly, when these students enter college (e.g., Berkeley), they are extremely leery of a reversal of what has been drummed into them for most of their precollege schooling. Ironically, what the New York, Capital High and Berkeley examples demonstrates, however, is that we must make the effort to teach Black adolescents to compete in collaboration with each other in order to maximize their human potential.

In the next section of my presentation, I shall offer some conclusions and implications based on the findings emerging from my study at Capital High School and the work of Mr. Green at Mott Junior High School and Professor Treisman at the University of California, Berkeley, regarding how social policy might be structured and implemented to increase Black students' effort and motivation in the school context.

VII. CONCLUSION

I shall conclude my presentation today by noting that ultimately the larger society is implicated in both Black and other nondominant-group children's persistent underachievement in the school context and in their unwillingness to compete with dominant-group peoples, as evidenced in GPA and other indicators of academic excellence. This is the unfortunate outcome of a social system which is structurally: (1) ill-prepared to provide them with equitable status in the existing social hierarchy and, more importantly,

(2) unwilling to make use of the group-centered or collective ethos which the students bring to school with them in ways which enhance rather than impede effort and learning in the school context. I have tried to point out in this presentation that Black students and other involuntary minorities (Puerto Ricans, Mexican Americans and American Indians) are victimized by their consignment to a castelike status in the society. It is the unwillingness of schools to make use of the collective identity system so prevalent in the Black community, as well as the evolved responses and perceptions of these social groups, which are at the base of the limited effort of minority children in the school context. Unfortunately, Black and other minority students' perceptions and responses to the individualistic, competitive ethos of the school curriculum are adversely affected by the actual texture of the lives of the adult members of their various social groups and their own inability to compete with noncastelike groups for summer jobs and other perks which they are taught are the inevitable outcome of excellence in academic performance.

In this presentation I have been primarily concerned with explaining how and why the Black students I studied in a high school in the District of Columbia Public Schools were able to obtain academic excellence, despite the existence of the collective or group-centered ethos described above. In accounting for these differences, I have stressed the importance of looking at the historical, structural and cultural factors in the students' responses and perceptions of what is open to them as adult members of the society. At the same time, I have tried to indicate the strength of ligatures or social attachments.

Of particular concern in my analysis are the effects of what I have described elsewhere (see Fordham 1985; Fordham and Ogbu 1986) as the twin phenomena of an oppositional social identity and an oppositional cultural frame of reference. In discussing this aspect of the lives of Black adolescents, I have tried to indicate how an oppositional cultural frame and social identity differ from a cultural frame which can be accurately labeled "different". Moreover, I have tried to impress upon you, my audience, the importance of seeking a solution to the problem of Black students' underachievement by considering social policies which take into consideration the complexities attendant to the cultural, historical and structural factors which have made Black adolescents who they are. I have argued the importance of a historical perspective because, as some researchers (see LeVine and White 1986) have recently indicated, "History is more powerful than policy." A refusal to consider historical, cultural and structural features often results in thwarting, magnifying and diverting policy initiatives without respect for those who planned them. Such a policy orientation (i.e., one which does not consider cultural, historical and structural features) tends to minimize the pervasive unintended consequences which are the outcome of social policies which are too narrowly defined. Essentially, it is imperative that we look at what has made social groups who they are. For instance, the pioneering spirit which characterized the Europeans who settled on the North American continent is still a part of the psyche of most Americans today. Like all other social groups, Americans tend to use this historical image to structure the perceptions of school students. At that time in the history of America, transplanted Europeans were imbued with the notion that the sky was the limit in terms of their ambitions, and they acted on those perceptions. Having transplanted this perception to the "New World", descendants of those Americans are baffled today by the widespread diminution of this competitive ethos. Indeed, we are so disturbed by it that this legislative body holding hearings today--the Joint Economic Committee--is trying to determine what went wrong; why America's children are not acting like Americans. Indeed, the Committee wants "experts" to tell them what we need to do to discourage and/or eliminate this blight on our national reputation and character.

As an anthropologist, what I am trying to suggest to you today is that not all Americans share this historical legacy; nor have they benefited in a very measurable way from its promulgation in the school context or the work force. Rather, Black and other nondominant-group children's historical experiences suggest that they have been victimized in their efforts to compete with their dominant-group counterparts in those arenas. Additionally, in response to the dehumanizing effect of this intractable policy orientation, the oppositional features of the Black American cultural system have grown in the school context, often leading to disproportionate dropout rates and underachievement on the part of Black and other minority students. Given this social reality, Black students have learned to limit their competition to arenas which are largely eschewed by dominant-group Americans,and/or they limit their efforts to an alternative cultural system which highlights a different kind of ethos. In the case of Black Americans, my research findings indicate that they have developed a cultural system which tends to highlight a group-oriented or collective ethos. In the Black community this group - centered ethos appears to be in opposition to that of the dominant cultural system, in that the primary ideal guiding the behavior of group members is one which "seeks self-realization through personal effort in service to the group." The extent to which Black children in the school context identify with this group-centered ethos and the perceived structural limitations confronting Black people in this country are factors which are often discounted or not considered when planning social policy which affects

Black children in the school context. Policy makers do this at their peril because, as many researchers have noted (including LeVine and White), "schools do not just teach children, they evaluate them in ways that affect the lives they will lead, the roles they will play, the advantages to which they will have access." In return for these social advantages, Black students and other "culturally different" social groups must develop new social identities. Schools must also instill in these students new ways of competing with each other and members of other social groups. Further still, they must also be taught to appreciate new forms of family life and a different work orientation. These narrow options present real dilemmas for Black students, primarily because of the value they attach, at the same time, to alternative ligatures. Consequently, policy makers who develop and implement social policies which are intended to produce certain social change are obligated to consider the economic and cultural contexts in which these policies will operate. This is imperative because failure to consider these factors will result in the emergence of both unanticipated and unintended consequences, both locally and in long-range implementation. A contemporary example of this undesired outcome is evident in the desegregation policies which were implemented during the late sixties and seventies. Inadequate attention was given to the fact that social policies are mediated by culture and that Black Americans, like other American social groups, are enjoined and constrained by a viable cultural system. Consequently, eliminating longstanding social and cultural barriers could possibly lead to an unintended outcome: the "burden of 'acting white'". This unintended outcome has emerged and policy makers and educators are baffled by its presence and persistence. Indeed, many deny its existence; others argue that its presence is indicative of a pathological stream in the Black community. Very few view it as an unintended outcome of well-intentioned social policy which was narrowly defined and which did not, at the same time, give adequate attention to the mediative effects of preexisting alternative ligatures or social attachments within both the Black and white communities.

In my presentation today, I have tried to show by reference to the work of Mr. Green and Professor Treisman, how it is possible to raise,on a massive scale, the school achievement pattern of Black students. These examples indicate that when school achievement is anchored in a context which mitigates against the loss of social attachments (i.e., peer group support and anchorage), Black students perform in school in ways comparable to those of their dominant-group counterparts. Hence, when the mediative influence of the historical, cultural and structural factors is considered in the development of school factors, Black students' performance on school measures of success is significantly enhanced. When Black students perceive school as a place where their self esteem is not only enhanced, but they are urged to develop even stronger ties to their existing ligatures, school attendance and other indicators of academic excellence are evident.

What I would like to emphasize here is that, although the findings emerging from my study at Capital High suggest both the power of the peer group and its oppositional relationship to academic excellence, it is important to emphasize that the peer group influence is neither innately good nor bad. My findings, along with those emerging from the study conducted by Professor Treisman and the policy adaptations of Mr. Green, indicate the power of the peer group to influence behavior and academic effort. Unfortunately, the group-centered ethos characteristic of the peer group operating in the Black community is induced to operate in opposition to the existing school structure. At Capital High, for example, the established school policy was not adopted to mitigate the oppositional features of the peer group. Consequently, school achievement on the part of Black adolescents was seriously compromised and those students who sought academic excellence in defiance of existing peer norms had to learn to cope with what I have described elsewhere as the "burden of 'acting white'". They were often accused of acting white because their behavior was drastically different from that of their peers and because they sought to minimize the ligatures they shared with their peers by developing strategies which camouflaged their academic efforts, including the development of a raceless persona. Some readers have erroneously interpreted this compelling description of the students' behavior and response at Capital High as prima facie evidence of the innately evil effects of peer influence at the school.

Nevertheless, the evidence presented here today suggests that, when the school structure supports group-sanctioned learning, Black students perform as well as or better than their white counterparts on school measures of success (see Bishop 1986:44). However, even in the context of group learning, the oppositional influence which I have argued is an endemic feature of much of Black life in America, can and does emerge. Professor Treisman's work suggests that when Black students perceive that they are being taught in ways which attempt to remediate presumed weaknesses, they resist school-sanctioned group learning and the group works to thwart academic effort. Apparently, it is important, if we desire to enhance academic learning in the Black community, to teach to the strengths of Black students, even when we are using group-sanctioned learning practices.

Furthermore, the evidence I have presented today should begin to help us plan a course of action which will lead to massive greater achievement in the school context on the part of Black students. I am excited about what can be done to change the long-established achievement pattern among Black students so widely reported in the research literature. I am convinced that we can change Black students' performance in the school context, but we must do it by making full use of the strength and influence of the peer group in the context of the historical, cultural and structural factors which have resulted in Black peoplehood. For too long educators and social policy makers have erroneously assumed that peer group influence is automatically negative. The evidence I have presented here today is the first step in the destruction of this assumption. What these data suggest are how our willful refusal to support the group-sanctioned learning style of Black students has destroyed their willingness to pursue school-sanctioned learning and by extension their upward mobility aspirations.

Finally, if I were able to make some recommendations to the Joint Economic Committee of the Congress of the United States, regarding how we might begin to make Black people more competitive in the work force, they would center around the findings emerging from my study of Black students' attachment to group-sanctioned learning.

Living with the students and their parents and teachers for the two years I did while collecting the data for the study, I became more and more convinced of the need to change the way we structure schooling for Black students. The work of Professor Treisman and Mr. Green lends further credence to my tentative conclusions. Like Black adults, Black students at the adolescent level have learned to appreciate the value of the group in focusing and changing social policy for them. In fact, they appear very conscious of how Black people have made gains in the social system: using group means to change unacceptable practices and limitations. Consequently, to continue to structure their learning as we have traditionally done in the school context to produce individual excellence is asking them to swim upstream, alone. Inevitably, only a small number of Black students will survive under these conditions, as the findings from Capital High and the University of California at Berkeley indicate. But is this what we want? Do we want to continue to waste most of the human potential extant in the Black community in an age when technological growth indicates an even greater need for America to make use of all its human potential to stay competitive in the world economy? Here I must refer, again, to the work of LeVine and White (1986). These researchers looked at how Japanese children excel in school, and concluded that one of the primary reasons for their high performance is the school's focus on commitment and effort rather than innate ability. Moreover, these researchers insist that, contrary to the widely held view of Japanese schooling in America, Japanese students are not encouraged to compete with each other. Indeed, Levine and White insist that in the Japanese school context, "competition is compartmentalized, restricted to a single moment in the life course, and buffered by an emphasis on harmony and homogeneity." Perhaps we could learn from the the Japanese example and begin to emphasize the importance of effort and commitment over innate ability and, more importantly, adequately reward Black students and their parents for their embracement of these factors in their work and school behavior.

The lone remaining concern, once we have tapped into the factors which mediate against academic excellence in the school context, is how, at the same time, we might begin to modify the castelike nature of the opportunity structure to enable Black students whose academic skills are comparable on school measures of success to those of their dominant-group counterparts to compete with them on an equitable basis without regard to race or other socially ascribed characteristics. Failure to move on both social fronts concurrently--adapting the structure of the school so that it is congruent with the group-centered ethos characteristic of the Black community, and dismantling the existing castelike nature of the social structure to enable Black people to minimize their racial identity--will perpetuate the existing massive underachievement and high dropout rate of Black and other minority students.

Thank you.

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Representative SCHEUER. All right. We are finished with the scholarly observers, and now we are going to get to the hands-on practitioners in the trenches. So we will hear first from Ms. Topps.

Ms. Bettye Topps is principal of the William McKinley High School, since 1982, and has been an embattled leader in the trenches. We are very happy to have you here, Ms. Topps, so take your 8 or 10 minutes and chat with us informally about the problems of attitude and behavior and what you have been able to accomplish in the trenches where the action is.

STATEMENT OF BETTYE WASHINGTON TOPPS, PRINCIPAL, WILLIAM McKINLEY HIGH SCHOOL, WASHINGTON, DC

Ms. TOPPS. Thank you, Mr. Chairman, and I thank you for the opportunity to appear before this subcommittee to examine issues relative to the "Competitiveness and the Quality of the American Work Force."

It is not surprising that you have indicated that high school dropouts, student attitudes, and behaviors are considered appropriate discussion points for this forum, and I applaud the committee for its wisdom in conducting these hearings.

I freely confess that I don't have the answers to the dropout problem. It is a longstanding problem on the American education scene. It is not a new problem. But what is new, perhaps, is how these persons are to fit into the existing jobs and the impact of their lack of skills on the American work force.

I come before you, therefore, as a practitioner. One who seeks to share, based on 20 years of experience with secondary school students, strategies that are currently being used in the District of Columbia public school system and to make some recommendations that are rooted in the practitioner's knowledge of the educational process.

One factor that may contribute to our inability to get at the root of this problem, specifically, to solve the dropout problem, is the disagreement between researchers and educators as to what criteria to use in order to determine who is or who is not a dropout.

Therefore, for purposes of my discussion, I would like you to focus on these three characteristics.

The person is generally not white. If the person is white, he is generally not middle class. He is poor, needs special help with seeing, hearing, walking, reading, learning, adjusting, and growing up, is pregnant or married at age 15; is not smart enough or is too smart.

I submit that both the causes and the problems of school dropouts are embedded in inefficient educational, economical and political systems, and further, that the basic problem lies in the attitudes and behaviors of society, as much as it does in the attitudes and behaviors of students.

Children mirror what they see. They feel deeply what those around them feel, and they derive their self-image from the eyes of others.

Today, high schools are populated with many students who are actively and feverishly engaged in the pursuit of knowledge; they are well motivated and they are well behaved. There are, however, those within our schools who are not impressed with the idea that education is important to success, and so their behavior tends to be disruptive.

We must remember, I think, that student attitudes about school or about anything are formed by association with significant others; their parents, their teachers, their friends, their environment and the economics of their world. Whatever our children are, we have created them. Students who have negative attitudes about school find little in their world that supports the notion that education is of value. They are probably products of parents who may have dropped out of school.

If not, they are children of parents who are so busy trying to make a living for their family that they don't have the time or don't take the time to dedicate attention to the academic development of their children. In their world, teachers and schools are openly discussed with disdain, both verbally and in print. The shortcomings of public education, their only hope, is waved like a red flag before them. The subliminal message is, why try? No matter how hard you work, if your family cannot afford a private education, you will always be inferior.

In their world, there is no correlation between education and economics. For in their neighborhood, few doctors, lawyers, ministers, Congresspersons, or others who are successful, cannot be found.

Representative SCHEUER. What may not be found?

Ms. TOPPS. The professional who is highly educated, highly motivated.

Representative SCHEUER. Can't be found in the ghetto community?

Mr. TOPPS. Cannot be found. But if there is a professional in their community, it is generally the teacher. However, most educated person they know, up close and personal, does not typify a correlation between education and economics. The teacher's life style does not demonstrate that this is so. In their world, a person who is able to afford all that the media constantly tells them one must have in order to be considered acceptable, and possess it in great abundance, is the street criminal, most specifically, the dope dealer.

As young children, they watch, they observe, they question. They want to believe you when you say crime does not pay; however, that is contrary to what they see. They wait for the appropriate entities of society to do what must be done to stop this evil. They wait, and they wait. And now they are teenagers.

The message now is, we can't stop it. You must stop it and you must stop it by saying no.

To a significant number of children, that's a viable alternative. They are actively engaged in the campaign to "Say No To Drugs." But for our potential dropout, the one who is looking for easy and quick money, this is now his ticket to have, and to have more abundantly.

They are now part of the "drug culture." However, instead of dropping out of school completely, they now stay in school, not seeking knowledge, but now they are seeking customers.

Representative SCHEUER. Seeking customers?

Ms. Topps. Seeking customers. They fail year after year, because they need to remain in school in order to conduct business. Now they become part of another statistic about our schools, and that is, that of students who fail year after year. Because they drive expensive cars wear expensive clothes, and have a great deal of money, they are influential. For students who are not rooted in an atmosphere that promotes positive reinforcement in their homes and in their community, they begin to emulate the behaviors of these students. Such behavior generally leads to a lack of concern for peers and adults, a lack of academic concern, and a lack of concern for property and life.

We must find a way to remove these people from our society, and we must find a way to remove them from schools.

As a practitioner, I am often baffled by the notion that society expects a principal to remove drug dealers from the school, when we are unable to remove them from society. The most we can do is to try and provide an atmosphere where our children are safe, where we attempt to keep them from conducting business within the school. However, we are unable to remove them from areas around our school.

I do not propose that the only reason students drop out of school is due to the drug culture. I believe that there are many reasons which we can adequately address in the school and in the community. In order to restore competitiveness and the quality of the American work force, we have to find a way to produce a more self-disciplined, articulate, multilingual, and analytical worker.

The attitudes of our current high school students toward learning were formed—and I agree with a previous speaker, during the early years. It is during those years that our current high school students were caught in the era of experimentation. I don't know whether you remember the years of new math, the years of black English, the years of creativity rather than standard structure.

During the sixties and seventies there were experts who convinced those of us in education that it was not enough to turn out competent, articulate, functional graduates; we must now focus attention on making them happy and self-centered. The great experiment began in grade 1, marched merrily along until these fun-loving, self-centered graduates began to reach colleges and the workplace. The rest is history.

Now the outcry is for standards and discipline. Correct me, if I am wrong, but I think we had that before we had the cure. It is possible that this new battle cry may even be led by those who told us earlier that we needed to reform our schools. Even so, we must realize that many of our current high school students were caught in midstream when the tide turned. Nurtured during their early years by the milk of fun and self-centeredness, they now find themselves in surroundings alien to their nature. Institutions are through vocational high school centers that are well equipped, so that they might acquire entry level economic skills and receive some remediation.

These various programs serve different groups of students in different ways. We have programs that serve students who are age 16 to 21, that are focused on remediation and eventually, the awarding of a diploma. We have programs that are focused on persons who are 16 and older, and they focus on intergenerational learning in the vocational centers where programs operate at least three times a day. This allows persons to participate in accordance with their personal schedules.

Representative SCHEUER. At least three times a day?

Ms. TOPPS. Yes. The same program is offered morning, afternoon, and evening.

Representative SCHEUER. This is for kids?

Ms. TOPPS. It is for kids and it is for adults too.

Representative SCHEUER. Adults too.

Ms. TOPPS. Our school system provides a number of alternative school settings for students who are having some difficulty in the regular school, and some of them, as I have said, provide the opportunities to either earn a diploma or a GED. A relatively new program has been designed to meet the needs of students age 12 to 17 who need temporary, concentrated support and reinforcement in order to reenter the regular school.

In this particular program, commonly known as PAUSE, Providing an Alternative Unique School Environment, brings together a very highly trained staff composed of psychologists, social workers, academic teachers, administrators, and a program coordinator with a law background. This staff is augmented by resources available at the Washington Children's Hospital Center. This team of persons collaborate to provide immediate services to students and their families.

I believe that the answer to our problems lies in what we do and say to our students, especially during their formative years. We must instill in them the notion that they have the power to shape their own lives through self-discipline and persistence. They must somehow internalize the fact that failure, no matter when it occurs, is not insurmountable. I believe that appropriate nurturing, guidance and counseling from significant others makes a difference. To be truly effective, though, I believe such efforts should begin at birth.

As a high school principal, I am often frustrated by the notion that our community expects to solve the high school dropout problem by focusing its inquiry or its remedies only at the secondary level. I believe there are many strategies that we can use in the elementary school that will help to build on whatever activities are started in the home to make youngsters understand the importance of education.

In the interest of time, I would ask that you read those in my prepared statement.

Despite the valiant efforts of many school districts—and there are significant efforts being made around the country, we continue to have dropouts. You have heard some of them mentioned this morning.

In our school district, we have focused on the concept of counseling. We have focused on the concept of early remediation, beginning at grade one, that is triggered by a promotional process that we have implemented both at the elementary and the secondary levels. We have expanded our vocational opportunities to students. We have made it possible for students who have dropped out of school to reenter.

These efforts are expected to positively impact upon the academic and social deficiencies and to bring about behavior modification of students.

Representative SCHEUER. Excuse me. Can you tell us what constitutes this alternative school environment? Is it a place outside of the school? Is it in the school, but in some kind of special setting? What do you mean by alternative school environment?

Ms. TOPPS. This is a place outside of the regular school environment. It is in another school building.

Representative SCHEUER. In another school building?

Ms. TOPPS. In another school building, and it is staffed by District of Columbia public school employees who have specific skills and specific training, and I think the thing that makes it unique is the strengthening of the staff with all of the resources of Children's Hospital. That brings together the kind of collective support that make a difference. The fact that it is family oriented, concentrating on providing services to both the child and family is also helpful.

I think the whole notion is that when we look at what effects student behavior and attitude we must focus on the significant others and their environments. Because working with a child alone does not always get the results that one expects.

In conclusion, I would like to make the following recommendations. I believe that in order to have all students and persons enter the work force we must encourage the community and industry to provide opportunities for students who are less capable. I believe that with proper nurturing capable, average youngsters can achieve whatever the expectations are as long as they are clear and as long as people work diligently to have them meet and understand these expectations. However, there are those in our society who are "less able" and we must begin to pull together the resources that will allow them to enter the marketplace as productive workers. Sometimes that will take longer than what is normally expected, usually between the ages of 6 and 18, but we must act now. We must provide an academic setting that will enhance people's ability and desire to remain with the educational process long enough to become competent.

I make the following recommendations, not only to this group but to any group of persons who have policymaking responsibility:

That we extend compulsory school attendance through age 18 or at least high school graduation, whichever comes first.

That we focus our attention and resources on preventive actions during the elementary grades in order to decrease the number of students arriving at the high school level without the basic prerequisite skills, because if they do, the possibility of them exiting without these skills is real indeed.

And I would like to see us effectively enforce the truancy laws with appropriate funding for resources and personnel.

The high schools are not currently set up to do the kind of remediation on a large scale, that is required when students come with 5, 6, or 7 years worth of deficiencies.

I, therefore, recommend that we reorganize the high school curriculum and the high school day to expand and increase learning opportunity. This may be accomplished by offering courses after working hours that are equivalent to high school courses; working more closely with industry to identify specific skills required for entry enployment; presenting to students a clear instructional path in actual preparation for the next step—be that postsecondary study or immediate entry into the workplace—expanding graduation requirements or, if not that, mandating that schools structure each student's instructional path to include the following: keyboarding skills, vocational——

Representative SCHEUER. What was that?

Ms. TOPPS. Keyboarding.

Representative SCHEUER. What does that mean? You mean working the typewriter or computer?

Ms. TOPPS. Or related instruments. Vocational education survey courses with opportunties for in-depth study.

The whole notion is that no matter what you do after high school you are eventually preparing to work. You ought to have some idea of what kind of work opportunities are available and how you go about adequately preparing for those opportunities.

I believe we should focus on the verbal skills of our students; try to get them into the habit of speaking correctly. We need to concentrate, for some of them, on functional writing. Further, I believe every student, whether he is gifted or not, should be exposed to employability skills. That the study of a language other than the mother tongue each year of schooling, beginning no later than grade 1, is necessary.

The expected outcome of each of these recommendations is that each student will graduate with a diploma, and with marketable skills that he or she continues to develop in the world of work. The students will be secure in the knowledge that whenever they enter the work force that he does so as a viable, contributing member, ready to compete in the world marketplace.

Thank you.

Representative SCHEUER. Thank you very, very much.

[The prepared statement of Ms. Topps follows:]

PREPARED STATEMENT OF BETTYE WASHINGTON TOPPS

PREVENTING HIGH SCHOOL DROPOUTS: ATTITUDES AND BEHAVIOR OF STUDENTS

Mr. Chairman, my name is Bettye W. Topps and I am Principal of the William McKinley High School. I wish to thank you for this opportunity to appear before this subcommittee as it seeks to examine issues relative to "Competitiveness and the Quality of the American Workforce".

It is not surprising that the issues of high school dropouts and student attitudes and behaviors are considered appropriate discussion points in such a forum. I applaude this subcommittee for its wisdom to conduct hearings on this problem and I encourage you to seek testimony from parents and students in order to determine the full extent of the problem and to examine its causal factors and consequences.

I freely confess that I do not possess the solution to the problem of preventing high school drop-outs. Let me assure you that had I been blessed with such a long sought after jewel I would not have waited until this hour, indeed this very moment, to reveal it. For the drop-out phenomenon is not a new one on the American education scene. What is new, perhaps, is the problem of fitting these persons into the existing jobs, and the impact of their lack of skills on the American workforce.

I come before you as a concerned educational practitioner. I seek to share insights gleaned from twenty years of working with secondary school students, strategies currently used in the D.C. Public School System, and to make some recommendations that are rooted in a practitioner's knowledge of the educational process.

One factor that may contribute to our inability to solve America's high school drop-out problem is the failure on the part of researchers and educators to agree on a common set of criteria for determining who is or is not a drop-out. Therefore, for purposes of this discussion, I ask you to focus on the following characteristics of persons who are most likely to leave school prior to graduation. He/She is probably non-white, if white -- not middle class, is poor, needs special help with seeing, hearing, walking, reading, learning, adjusting, growing-up, is pregnant or married at age 15, is not smart enough, or is too smart.

I submit that both the causes and the problems of high school drop-outs are imbedded in inefficient educational, economical and political systems. Further, that the basic problem lies in the attitudes and behaviors of society as much as it does in the attitudes and behaviors of students. Children mirror what they see, feel deeply the emotions of those around them, and derive their self-image through the eyes of others.

Today's high schools are populated with scores of students who are actively and feverishly engaged in the pursuit of knowledge. They are well motivated and well behaved. There are, however, those within our schools who are not impressed with the idea that education is the key to success, and whose behavior tend to be disruptive.

We must remember that children's attitudes about school or about anything are formed by association with significant others (parents, teachers, friends), their environment, and the economics of their world. Whatever our children are we created them. Students who have negative attitudes about school find little in their world that supports the notion that education is of value.

In their world parents,perhaps, are high school drop-outs. If not, they are so caught-up in the process of scraping out a meager existence that they give little attention to his/her academic development. In their world teachers and schools are openly discussed with disdain both verbally and in print. The shortcomings of public education (their only hope) is waved like a red flag before them. The subliminal message is why try. Even if you do your best you are, and will always be, inferior because your parents cannot afford the cost of a private education.

In their world there is no correlation between education and economics. If you are an inner-city child doctors, lawyers, accountants, ministers, congresspersons, and a host of successful others cannot be found in your neighborhood. A professional who may still live in the neighborhood is the teacher. The most educated person you know, up close and personal, however, does not typify a correlation between education and economics. In their world the person who is able to afford all that the media constantly declares one must possess in order to be accepted, and possess it in great abundance, is the street criminal. Specifically, the dope dealer.

As young children they watch, they observe, they question. They want to believe you when you say that crime does not pay. However, that is contrary to what they see. They wait for the appropriate entities of society to do what must be done to stop this evil. They wait, and they wait. They are now teenagers. The message from society now is -- we can't stop it; you must stop it. You can do so by simply saying NO. "Say NO TO DRUGS". For the vast majority of students this is an excellent concept. They are actively participating in this national campaign. To our potential drop-outs, however, in search of fast and easy money, this is their ticket to media heaven. The opportunity to have, and to have more abundantly.

They are now part of the "drug culture". However, instead of dropping out of school completely, school is now seen as a marketplace. They enroll year after year, not in pursuit of knowledge, but in pursuit of customers. They fail, year after year, becoming apart of another statistic that bears unfavorably against our schools. Because they have money, wear expensive clothes, drive expensive cars (the embodiment of the "American Dream" as portrayed by the electronics media) they are popular and influential. Those students who are without strong positive influences in their lives begin to imitate their behavioral patterns. They begin to loose interest in academics, rebel against authority, display little respect toward peers, and adults, and a disregard for property and life.

We must find a way to remove these leeches from our society. I am amazed when the community demands that we remove them from our schools as if schools were entities outside of society. Until the demand is to remove them from our communities, the most that educators will be able to do is to provide a secure environment that prevent drug sale and usage within the school building, actively teach the dangers of drugs and encourage our students to "JUST SAY NO". The irony of our struggle is that when we are successful in identifying and removing these persons from our schools their removal is now counted in the drop-out statistics, without classification, because of the manner in which we determine those statistics. Consequently, schools are hit with it one more time. It is clearly a no win situation.

You must know that a significant number of our drop-outs are caught up in the drug culture as users and/or distributors. This is not merely a school problem. You must see it for what it is -- a national problem. We must rid our society of this plague. For persons at-risk it is, in my opinion, just as devastating to the national health as any disease known to man. It is destroying young minds by the hundreds of thousands.

I do not propose, here, that the only reasons for students leaving school prior to graduation are drug related. I freely admit that there are many others that can be addressed, adequately, by school and community to stem the tide of high school drop-outs, and to better prepare those who remain with us through graduation. In order to restore competitiveness and the quality of the American workforce we must produce a more self-disciplined, articulate, bi/multilingual, analytical worker.

The attitudes of our current high school students toward learning were formed during their elementary school years. For they are products of our years of experimentation. The years of the "school must be fun" syndrome; "if today is not a good time for learning -- maybe tomorrow" syndrome. It was a time of "new math" and black English", writing creatively rather than writing correctly. During the 1960's and 1970's there were "experts" who convinced the educational establishment that turning out competent, articulate, functional graduates was not enough. That we must now focus our attention on making them happy and self centered. The "great experiment began at grade one. Marched merrily along until these fun-loving, self-centered graduates began to reach college and the workplace. The rest is history.

Now the outcry is for standards and for discipline. Correct me, if I'm wrong, but I believe we had just that before the great cure. Is it possible that this new battle cry is now being led by those who brought us the great reform? Even so, what we must realize is that many of our current high school students were caught mid stream when the tide turned. Nurtured during their early years on the milk of fun and self-centeredness, they now find themselves in surroundings alien to their nature. Institutions that are demanding self-discipline, academic standards, serious of purpose and a competitive spirit. For some the adjustment has been slow and difficult.

I believe that the answer to these problems lies in what we do and say especially during the child's early and formative years. We must instill in our students (the earlier the better) the notion that they have the power to shape their own lives through self discipline and persistence. They must, somehow, internalize the fact that failure is not insurmountable. I believe that appropriate nurturing, guidance and counseling from all significant others will make a difference. To be truly effective, such efforts must begin at birth.

As a high school principal I am often frustrated by the notion that our community expects to solve the high school drop-out problem by focusing it inquiry and/or remedies only at the secondary level. If a student is not delivered into the high school with some basic prerequisite skills and a healthy attitude toward learning, gained during the more child-centered elementary years, the likelihood of exiting high school without these skills is real indeed. There are a number of reasons for this. They include the following:

- Elementary students present themselves to school excited about the prospects of learning. School is an adventure. It is exciting and a change from the home routine. By the time the student reaches the secondary level school has become routine, even a tedious, unpleasant routine for those who have had little success.
- The vast majority of students in elementary school are accepting of adult authority. Teenagers, by and large, are testing the limits of adult authority both at home and at school.
- Most elementary students are not yet caught up in the peer pressure which so biases teenage behavior.

It is during the formative years that I strongly believe that schools should take preventive actions. These actions might include:

- Counseling students and parents who have attendance problems.
- Developing clear disciplinary policies and procedures.
- Attempting to resolve barriers which keep children from coming to school by bringing additional public resources to bear on the situation.
- Deploying appropriate personnel/agencies to visit the homes of students with problems in order to determine appropriate services and/or referrals.
- Welcoming parents into the school as full partners in education. Encouraging classroom visitation, and volunteer services which foster regular contact with other parents and the formation and/or strengthening of parental groups for mutual support and improvement.

As students proceed through the educational system and only reference is made to underlying problems without taking appropriate corrective actions they become prime candidates for dropping out of school prior to graduation. When high school drop-outs are questioned as to their reasons for leaving school the most frequent response is, "I did not like school". This response almost always mask the real reasons. Underneath this dislike for school may be found an inability to read well and not having received appropriate instruction and materials. The student(s) may be of average intelligence but incorrectly labeled and placed in a special class for slow learners. There may have been financial limitations that the student(s) viewed as embarrassing. Whatever the reasons given, behind them can be found a student's or a family's need for help.

Despite the valiant efforts of many school districts a significant number of students are reaching the high school level carrying the baggage of unmet needs, groping with the pains of inadequate preparation, stifled by poor attitudes toward learning, and few coping skills. Therefore, high schools are charged with exploring strategies and tactics that will motivate students who have begun to turn off learning. In many school districts there are resources and programs that can be utilized in these efforts. Such is the case for the District of Columbia Public Schools.

The D.C. Public School System has implemented a variety of programs designed to impact upon potential drop-outs, drop-outs, as well as those who seek to re-enter. These programs focus on remedial educational opportunities, counseling, vocational education and work experiences, and alternatives school environments.

Our intervention efforts begin at the elementary level and continue through the secondary level. Academic intervention for under-achievers is both voluntary and automatic. Remediation for students achieving below expected levels in reading and mathematics is automatically triggered by our promotional policy known as the Student Progress Plan (SPP). This plan provides for constant monitoring of skill acquisition and intervention strategies beginning at grade one. The Secondary Student Progress Plan (SSPP) similarly specifies expected learning outcomes for all subject areas taught in grades seven through twelve. Specific strategies are outlined to address the needs of under-achievers at the secondary level.

Tutorial programs which offer additional assistance before, during, and after school are designed and implemented by each school with district financial assistance. These programs focus on meeting the needs of each school's particular population. The intent of all of the remedial education programs and opportunities is to deliver to the high school level a better prepared student who will enter a school better prepared to meet his/her needs.

Great emphasis is being placed on individual and group counseling at all levels of the system. Group counseling sessions are formed around issues that affect the specific needs of the school's population. Additionally, all schools focus attention on drug use/abuse/effects, teenage pregnancy(where appropriate), peer pressure and coping skills. High Schools have implemented the collabrative team approach which brings together various segments of the Student Services staff and the administration. This team organizes, plans and delivers meaningful and effective intervention measures for identified at-risk students. They bring to bear school-wide and community resources on an identified concern or problem.

Each high school staff has been augmented with an attendance counselor and an attendance aide who are backed by a centralized computer tracking system and regional attendance referral centers. These persons work with students who are identified as at-risk due to poor attendance and truancy. They direct system-wide and community resources to the students and their families in order to resolve school attendance problems.

Vocational education opportunities have been greatly expanded. We are striving to make each discipline reality based by connecting its study to opportunities and responsibilities in the real world. Each comprehensive high school provides a number or career related courses which provide for survey and continued training. They also present a number of work-study opportunities which provide salaries and academic credit as well as school coordinated after school work programs. In addition, students have the option of spending one-half of the school day in a well equipped Career Development Center for indept preparation in specific career areas. These students will exit our school system with a Diploma and a Certificate of Competency in a specific career area. There are a number of career focused programs which were conceived, developed, and implemented with the assistance of the private and public sectors. These programs are known as our Public/Private Partnership Programs.

For those who wish to return to the school system to develop and/or strengthen employment skills they may attend the Career Development Centers to acquire the necessary skills for entry level employment. The career center programs are intergenerational and are offered three times daily (9:00 A.M. - 11:30 A.M., 12:30 P.M. - 3:00 P.M., and 6:00 P.M. - 9:00 P.M.) for convenience.

Our school system provides a number of alternatives school settings designed to meet the academic and social needs of students who are experiencing difficulty in regular school environments. They also provide excellent opportunities for students who wish to re-enter school without embarrassment or stigma.

Programs designed for students ages 16-21, of which S.T.A.Y. (School To Aid Youth) is an example, lead to the attainment of the High School Diploma They provide extensive remediation experiences and social services. There are also adult learning centers designed for persons 16 years or older. These centers provide learning opportunities that lead to the attainment of the G.E.D.

A relatively new alternative program is designed to meet the needs of students ages 12-17 who need temporary, concentrated support and reinforcement in order to re-enter the regular school setting. This program, commonly known as P.A.U.S.E. (Providing an Alternative Unique School Environment), brings together a highly trained administrative, academic, and support staff which includes an on-site social worker, phychologist, and program coordinator with a background in law. The staff is augmented by the resources available at the Washington Children's Hospital. This team of persons collaborate to provide intensive and immediate services to students and their families. These efforts are expected to positively impact upon academic and social deficiencies and to bring about behavior modification.

I believe that the above examples represent a concentrated effort on the part of our school system to address the nagging and constant problem of high school drop-outs. I am equally confident that similar efforts are being made by other school districts. Reforms in schools, however, must be viewed in tandum with reforms outside schools. There is, without a doubt, an interdependence of education with economics, social, and political opportunities. The greatest motivator of student achievement levels is that of real job opportunities available in the larger society. It is unrealistic to expect under-achieving students to remain in school without the hope and prospect of gainful employment.

There has been significant collaboration between private industry and school systems. A great deal of these efforts have been aimed at the above average or average students. We must now expend some collective energies designing instructional programs and creating employment nitches for under-achievers.

Recognizing that fewer and fewer work opportunities are available for the unskilled we must focus our work together on this reality. It is this reality that heightens our concern for a problem that has plagued education since its inception -- how to effectively serve those who are less able. The problem is more acute today due to the fact that tasks that were previously performed by unskilled workers (unually drop-outs) are now being performed by robot-like machines controlled by electronic brains. The workplace now requires workers who are able to think, articulate, and compute, and possess a strong work ethic.

We must act now to help those students who are at-risk. Especially those who are currently in high school settings with academic and social deficiencies. We have an obligation to teach requisite employability skills to all students however long it may take.

I recommend for your consideration and the consideration of others who have policy making responsibilities the following:

1. Extend compulsory school attendance through age 18 or high school graduation; whichever comes first.
2. Effectively enforce the truancy laws with appropriate funding for resources and personnel.
3. Focus some attention and resources on preventive actions during the elementary grades in order to decrease the number of students arriving at the high school level without the basic prerequisite skills.
4. Reorganize the high school curriculum and the school day to expand and increase learning opportunities. This may be accomplished by:
    - Offering courses after working hours that are equivalent to high school courses.
    - Working more closely with industry to identify specific skill requirements for entry level employment.
    - Presenting to students a clearer instructional path

in actual preparation for the next step -- be that post secondary study or immediate entry into the workplace.

- Expanding the graduation requirements or the mandate that schools structure each student's instructional path to include the following:
  - Keyboarding skills
  - vocational education survey course with opportunities for indepth study.
  - Speech
  - Functional writing
  - Employability skills
  - The study of a language, other than the mother tongue, each year of schooling beginning no later than grade one.

The expected outcome is that each student will graduate with a diploma and marketable skills as he/she continues his/her training via post secondary education or the world of work. The student will be secure in the knowledge that whenever he/she enters the workforce he/she does so as a viable and contributing member, ready to compete in the world marketplace.

Thank you.

Representative SCHEUER. Now, we will hear from our other practitioner in the trenches, Mr. Hamer.

Mr. Hamer is deputy commissioner for school improvement of the New York State Education Department. In this position he directs the educational development efforts to strengthen student performance in almost 400 New York City elementary and secondary schools that have been identified as being in need of assistance by the State, and he just released a controversial report that was very much dealt with in the press entitled "Increasing High School Completion Rates: A Framework for State and Local Action."

We hope that you will discuss this significant report with us, Mr. Hamer.

Mr. HAMER. I sure will.

Representative SCHEUER. Let me just say your prepared statement will be printed in full in the record. So we hope you will relax, have a cup of coffee, and just presume we are in a living room together and you are chatting with us informally for 8 or 10 minutes. Don't hesitate to refer to anything you have heard before this morning, and after 8 or 10 minutes we will have some questions from the both of us.

STATEMENT OF IRVING HAMER, DEPUTY COMMISSIONER FOR SCHOOL IMPROVEMENT, NEW YORK STATE EDUCATION DEPARTMENT

Mr. HAMER. Thank you very much for inviting me and having me here.

I appreciate your reference to that controversial report. I hope you have had an opportunity to take a look at it. If you haven't I hope you and your colleagues will take a look at it.

Regretfully, its controversy is related to 2 pages, and it is about 80 pages long. Such is the way of controversy.

Representative SCHEUER. Well, Congressman Hawkins and I, as politicians, would say in answer to that, so what else is new? [Laughter.]

Mr. HAMER. That is why I thought I would mention the nature of the controversy.

What I would like to do is paraphrase the comments I have prepared for you today and perhaps promote the basis for some discussion and conversation.

I regret my tardiness, but unlike some of us, the airlines have their way of controlling things.

Representative SCHEUER. We are delighted you are here.

Mr. HAMER. Thank you very much.

I would like to say initially that the matter of educating children in the United States is one fraught with contradiction, and it is curious because this contradiction seems to permeate everything that we seem to do, and I would characterize the contradiction by saying we do an extraordinarily good job of educating a tremendous number of people in the United States.

In fact, one could make a very strong case in lots of ways for some young people that we do the best in all of the Western world with regard to how we educate some young people. In contrast to that, the contradiction, if you will, goes something like this:

We do a worse job in educating other parts of our population than any other Western society.

Representative SCHEUER. Educating other parts?

Mr. HAMER. Other groups of children. These kids we refer to as people who drop out, are in the underclass, or are poor. We do a dreadful job of educating them.

Some other contradictions that exist have to do with the extraordinary prosperity of some people who continue to be shamed by the poverty and poor performance of others.

Far too many of our children, in my judgment, do not have access to what might be best described as the early beginnings that are so essential to success in what we call the developmental approach to education; that is, step by step. We don't start strongly to begin with, and you have problems later on. Research is very strong in this area.

Another point that is of particular importance to me is that we have a tension between access and excellence that has caused cracks in the educational system where these cracks have contributed to our loss of dominance in the industrial and technological spheres of the world.

My purpose in coming to talk to you today is twofold. I want to talk about what educators can do or what we have been doing particularly in New York State.

Representative SCHEUER. Your remarks will also be twofold because we are going to recess in about 4 minutes. So you can give us your remarks in two sections.

So if you want to organize it that way, fine. We just had a rollcall vote, and when we hear the next bell we will recess for about 12 or 13 minutes.

Mr. HAMER. Fine. I am going to talk to you today about being an educator and what it is that we are trying to get done in New York State and what I think other educators in other parts of the country ought to be doing, and also I want to speak to you a little bit about what I think is the appropriate role for the Federal Government.

Representative SCHEUER. That is what it is all about as far as Congressman Hawkins and I are concerned.

Mr. HAMER. There is a basic premise that I come from personally and that I think some of the research teachs me ought to come from, and that is that all the children can learn—all of them—and that all children except those that are most severely disabled have the capacity of completing the high school experience with the skills necessary to perform either postsecondary education or enter employment.

So what I am going to do when this first section is over is I am going to try to organize myself to talk to you about what it is that we are up to in New York State and what I think offers some real promise and what I think are key and essential activities for the U.S. Government to undertake with regard to educating children that we call dropouts.

Now, I want to make one important semantic distinction. I have purged myself and have tried very hard to purge the State of New York with regard to referring to children as dropouts. It is pejorative term and certainly not useful and not descriptive. I would defy anyone to define what they mean by dropout and who it is that is a dropout. I defy anyone to predict with accuracy who it is that is a dropout or who will become a dropout.

I, in turn, have tried to get the State of New York to accept the proposition that the task that lies before us is increasing high school completions, and this as an objective is more responsive to the conditions that children find themselves in.

So everything that I will say today will be directly related to what it is we must do to increase the rate of youngsters completing the schooling experience as it is currently defined and perhaps in a way that it will be defined later on.

This is not a semantic distinction. This is an important shift away from the notion that if you step out of school it is over. It should not be like that.

Now, the other thing I will do before you take off——

Representative SCHEUER. You are going to tell us soon what our options are?

Mr. HAMER. That is right. In the second section. I was just organizing the second section. I am sort of laying the stage.

Representative SCHEUER. Beautiful.

Mr. HAMER. What is also important for me to say to you is that we do have lots of understanding about why kids do not complete the experience. There's lots of knowledge about that.

I can only say to you that as an educator, as a person you described as being in the trenches, that I must take responsibility for the school as not being responsive to the way students currently live their lives and that I cannot look to all the social issues, the conditions outside of the school, as an explanation for why kids do not succeed.

I reject such an explanation. I think that if the youngster sets his foot inside the school building we as educators or practitioners have a responsibility to adjust the school place to respond to the realities of the lives of the children and the conditions that they bring with them to school. Once they are inside the school building we must play the hand that has been dealt us.

That is a nice place to stop.

Representative SCHEUER. Beautiful.

All right, we will recess for about 15 minutes.

[A 15-minute recess was taken at this point.]

Representative SCHEUER. All right. We will convene the hearing again, and we will hear the second half of Mr. Hamer's testimony.

Please proceed, Mr. Hamer.

Mr. HAMER. Thank you very much. I hope the vote went well.

I come to you today after a number of months of work in New Youk State consulting with and talking to over 2,000 persons with regard to what we can and should be doing in the State for purposes of improving high school completion rates.

The document that you referred to earlier is a framework, and what I wanted to do is just provide you with a brief thumbnail sketch of what the key elements of the framework are, and as I go through those elements, what I hope you will glean is the response to the reason why young people don't complete school.

In the sequence that we have laid out for them, you all understand that we have developed a sequence that says you go to school

12 years and you go to school in order—and you don't go through school in order to come out inheriting a characterization of being a dropout.

The framework that we tried to develop in New York State was intent on responding to a set of conditions that we think leads to young people interrupting their normal educational experience.

First, I would say that a key item, a key responsibility of schools, is to help students develop a sense of identity and self-esteem and that for minority youngsters, Afro-American youngsters and Hispanic youngsters particularly, this can be done by making sure the school fosters a notion of heritage and culture.

Second, a key item, and one which I have already alluded to, has to do with making sure that young people do not reach the high school level with debilitating backgrounds; that is, we have had a social commotion and we have had very weak early childhood education programs, and the way to prevent young——

Representative **Scheuer**. Very weak what?

Mr. **Hamer**. Early childhood education programs.

Representative **Scheuer**. Right.

Mr. **Hamer**. And the weakness of these programs makes it possible for them to get to the high school level at a point at which they leave school in most jurisdictions at the age of 16.

Third, I would say we must—and I think any practitioner would be able to tell you they can identify a young person who is a likely candidate for not completing the experience in elementary school; that is, a student who is 1½ or 2 years behind in reading is a very good candidate at the third grade for not completing the school experience.

Similarly, a student who accumulates 90, 100, 150 days of absence in any given school year is a very good candidate for not completing the 12-year sequence that has been laid out for them.

This identification of young people as what we might refer to as young people at risk can be done early and remedies can be developed at an early stage of the school experience.

One of the things that we discovered as we moved about the State of New York was that there were an extraordinary number of exemplary programs that are not widely known designed to provide support and experience to young people in school.

One of the things that we don't do in the education community is that we don't tell the stories about what we do well at all, and there is a lot that is going on that is very good, very positive, and very proactive.

For the most part, most of us do not know about those extraordinary, exemplary programs, and we have identified lots of them in New York State, and we think that once identified they can be made available to other schools and other school places where there are heavy concentrations of children who are in distress. It is possible that subsequent implementation of these programs can result in improved completion rates.

A key item with regard to strengthening the completion rate has to do with the preservice of teachers and their inservice; that is, we find a very, very strained mismatch between what teachers actually study and what actually goes on in the school place. We find a mismatch between teachers' understanding of who their students are and who they are obligated to work with and who it is that is actually in the school place.

And so to the extent that we are able to attract young, bright college graduates to go into a classroom, we find they haven't the foggiest idea of what it is they are required to do, (A) and (B) they have less of an understanding about who it is that is inside the classroom and, C, and more devastating, is that these young bright-eyed college graduates who are in our classrooms across the country, certainly in New York State, find themselves not the recipients of what we call in-service preparation to any significant degree because for lots of reasons, mostly financial, no dollars are available to provide ongoing, intensive in-service preparation for teachers across the country. Certainly, that is the case in New York State.

Sixth, I would suggest to you that parents are children's first teachers. We have a way, particularly in schools in New York State, of practically requiring parents to participate in the primary years. But when a youngster has completed his or her primary years, what we find from the research is a tailing off of parental involvement with regard to a student's educational experience.

We think that it is precisely the point at which a parent must be encouraged to be most involved, beginning with the early adolescent years, the junior, middle-level years, through the high school years, that we in education must encourage parents to do that, and there are lots of ways to do it, and we can talk a little bit about some of the ways we try to foster in New York State the purpose of increasing parental involvement across the board.

The seventh notion that I bring to you today with regard to responding to the condition of low completion rates or how it is that we can increase those rates has to do with the role of the general community with regard to schooling.

I think all of us are now clearly aware that we cannot any longer relegate the total responsibility of educating young people to the school place singularly, but that we must talk to the general community in addition to talking to parents.

By general community, we are talking about the clergy that exists in any given community, the business community, and other civic persons and general citizens, and the question really is how do you promote that and how do you encourage it and how do you make it possible.

And one of the things we are trying to get done in New York State is to see the school as the center of social, cultural, and economic life in the communities. This is particularly important in communities that find themselves in distress.

All too often in communities, particularly urban communities, what you will discover is that there are no social infrastructures available in the community; that is, if you want to talk ghetto, you will find sometimes that the only social institution there is the school. Sometimes there will be a church.

But we are arguing that we want to figure out a way not for the school person to take responsibility for all the social, cultural, and economic activity of the community, but that the school be a site at which lots of activities are organized, making it possible, therefore, for the school to be open for extended hours during the day, on weekends, and throughout the summer months, serving not singularly as the bastion of instruction but as a place where a myriad of activities are going on critical to social life in the local community.

We can talk a little bit more about that if you look at something we call community renewal schools. Despite everything that we might do, I am convinced—and I think the data supports this point of view—that there will always be students who will leave school and will not complete the schooling experience in the sequence that has been laid out.

This has certainly been the experience throughout the history of the last 100 years of this country.

Representative SCHEUER. When this happens with middle-class kids, it is called breaking the educational lockstep.

Mr. HAMER. That is correct, right.

Representative SCHEUER. When it happens with low-income kids, it is called dropout.

Mr. HAMER. That is exactly right.

This condition has been around for a century, and the proportion of the condition is about the same. We are talking somewhere between 25 to 35 percent. It has been like that forever, and the data at the U.S. Bureau of the Census will support that. So it has really been around.

The issue is not whether or not the condition is all bad. The issue is whether or not we can organize ourselves to respond to a way that is more responsive to the current impact.

The current impact has its importance because of the concentration of black and Hispanic children, the loss of a key labor element, and the new demands of the economic system that require students and young people to have better preparation than was the case in 1930 and 1940. We can no longer accommodate those young people who do not complete the experience in quite the way we want to accommodate them.

So the current interest in this problem, or condition, is really useful because it offers us an opportunity to become a lot more mature in how we organize our school experiences to respond.

And with regard to those young people that we know that are going to leave school early, in 1990 and the year 2000, the issue is whether we can create sets of structures, be they alternative schools—I think Ms. Topps sort of alluded to whether we can create the transitional programs when the kid leaves that he or she can come back with a degree of dignity and respect and adequately integrate back into the school experience he or she might complete—and whether we can figure out ways to construct—I think we know how to construct.

The issue is whether we can develop the resources to support schooling experiences that occur during hours of the day different than the ones that we currently do. We are really locked into the notion of 9 to 3 or 8 to 4 or some such thing. The schooling experience can really take place from 10 to 10 or from 9 to 9 and on Saturday and Sunday and during the summer months, and we can be very sophisticated about how we organize such propositions, giving young people a real variety of strategies for completing their education that matches up with their individual needs and/or situations they find themselves in.

This is not an item for immediate remedy, for providing youngsters for the workplace. It is what I call a schooling experience of becoming more mature. Practitioners are becoming more mature about the way in which we organize the experience.

The last strategy that I would like to talk to you about is also one that comes out of the literature, and it gives me personal pride to say the research of Ron Edmonds is now sort of beginning to become a bastion of consideration throughout the country. It is what we call the effective schools research, and this research talks about what schools can and should be doing in order to make the experience more wholesome for all students inside.

Its basic premise is that all children can learn, (A), and I am also proud to say, by the way, that the city of New York has adopted a body of research and the implementation associated with the research, and the components of the research sort of go something like this:

Strong administrative leadership of the school makes a big difference; that the school be orderly and have a positive school climate; that there be a clear academic goal and a clearly defined curricula; that we monitor student progress; that we encourage students' and parents' involvement in learning; and that schools must involve the entire community.

Now, it is important to say that some of these things for us appear to be axiomatic. It depends on where you go to school. But the fact that someone is making an argument that there be clearly defined curricula is not axiomatic. There are too many schools where such definitions are not clear and too many schools where the climate is also not as wholesome as we might like.

In fact, in New York City, where I have spent a good portion of my professional time, there are schools that are in physically worse condition than some of our prisons, and that condition does not lend itself to a student remaining in school and pursuing the completion of a high school diploma.

Indeed, one might argue quite strongly that the desire to leave school earlier when the building has 5,000 students in it, is rat infested, and in deteriorating physical condition, with water rolling in from the roof and the like, is an appropriate response. I mean, to stay there is slightly pathological.

Representative **SCHEUER**. The kids think that society is sending them a message?

Mr. **HAMER**. Oh, no, they don't think it. They know. The message is really quite clear. It is really quite clear. New York City is no exception to this, though one might argue New York City has some extreme conditions.

But the message is really clear and, as I say, one must question the general well-being and healthiness of a particular student.

Another primary condition that needs to be responded to with regard to why people leave school is what we call mobility, and this is particularly true——

Representative **SCHEUER**. Mobility?

Mr. **HAMER**. Mobility. You might call mobility the pattern of movement between schools and/or between jurisdictions.

It is of particular importance among young people who are in poverty. So we have seen this pattern with migrant children for years, and in recent years we have begun, A, to develop strategies that respond to migrant youngsters as they move from migrant camp to migrant camp. There is a pattern of attracting those youngsters and providing a coherent educational experience.

For children who are in poverty but are not necessarily migrants, we still have mobility problems, but we have not become sophisticated with regard to responding to that particular condition in the way in which they live their lives.

In neighborhoods or in jurisdictions like New York City, places like San Antonio and other places that have large Hispanic populations that move back and forth between the original home base and the new home—as in the New York-Puerto Rico loop, as we call it, the folks moving back and forth between New York and Puerto Rico on a regular basis, between San Antonio and the other side of the border, such things like that—what we discovered was that people don't complete school because they go to visit grandpa in San Juan. They go to see grandpop in San Juan and they don't come back on Monday morning or they don't come back on Wednesday and they do that two or three times a year. They accumulate absences from school and they fall further and further behind, and then what they try to do is enroll in school in San Juan because they want to be by grandpa or mother in some cases.

This mobility is a real problem. It is a real problem, particularly for the children that we describe as being limited English proficient, and what we have tried to do in New York State is develop what we call a statewide student information data base.

Simply stated, we give them, by name, a presence in the data bank so that if they move from one jurisdiction to another or from one school to another there is a bank of information that the school can pull in order to frame an educational program for that young person. It is our way of knowing where young people are. This we think is going to be a major item.

But now the other thing we have done that is very important, and what we mention here, is the importance of occupational education or vocational education, what some people call VOC ED. We in New York State call it OCC ED, and I know that for years the OCC ED experience has been under real assault because people have described it as being out of sync with what is going on in the real work world today.

In New York State we have a useful experience that is worth reporting on here. The experience goes something like this:

When you take the schools that are described as occupational educational schools, dedicated to that, and you compare them to what we call the general schools, schools designed for general education, the completion rate among the OCC ED schools is higher than it is among the general education schools or, if you want to say it in parlance, the dropout rate at schools dedicated to occupational education in New York City is lower than it is in what we call the general track school.

That is important because the OCC ED schools in the State have begun to be redefined and reorganized with new curricular more responsible to both the educational capabilities we know about at current times and also the work demands in the workplace.

The primary purpose, in my judgment, of schooling is to affect students' achievement, high student achievement, and the purpose, in my judgment, is to make sure that society and the individual will benefit at some future point in his or her life. Such achievement does not result from minimal expectations or standards. Those things are important, but that is not what it comes from. It also does not come from what we call poor teacher preparation or in-service training or classroom instruction inside the classroom.

And so, because we recognize that in New York State, we have upped the graduation requirements for all students across the board. Some people would argue that these higher standards will precipitate higher rates of noncompletion of high school experience.

In addition to upping the graduation requirements, we have made teacher certification requirements more rigorous and demanding.

I was interested to hear from Ms. Topps about her interest in language requirements for all children because we are arguing that all teachers ought to have a language requirement before they come to the teacher ranks.

In addition, this is particularly important to me because as I walked in, Ms. Fordham was talking a little bit about the issue of culture in schools and such things as that.

But we have pressed forward with reviewing and revising all the State syllabi in the State for the purpose of making that syllabi more appropriately reflective of the cultural diversity of the State. It is all too often the case that the younger person can pick up a history book and not see a person of color anywhere in the book, any reference to a person of color in the book at all, and we find that to be quite inappropriate for the purpose of giving a student a sense of place in belonging in a school where he or she spends a tremendous number of hours during any given day.

My judgment is that we know a lot about what to do in order to increase high school completion rates. The strategies that we can frame for children in the middle years or in the high school years are fairly straightforward, and I think that as we have done in New York State, if any jurisdiction is dedicated to it, it could systematically increase the rate of high school completion or, conversely, reduce the dropout rate.

We have set for ourselves the task of increasing the rate of high school completion by 50 percent over the next 5 years, or roughly 10 percent a year.

The strategies work, and we know that, but—and this is a very important "but"—they work better if children come to school prepared to learn, and this is what I call another contradiction. The country has been terrific——

Representative SCHEUER. Excuse me. Would you describe what you mean when you say when a kid comes to school?

Mr. HAMER. I am going to do that right now. But before I do that, I am going to tell you about other contradictions because it is the backdrop to them coming to school prepared to learn.

Our Social Security system has done a terrific job, albeit not enough, at giving our senior citizens a place in society. At least there is something to look forward to, and there is a beginning of attending to the interests and well-being of our senior citizens.

We have done shockingly little with regard to investing in our future, and by coming to school prepared to learn, I mean very strong prenatal care for all children, universal. I mean parent education programs. One can look at the disproportion, at the number of teens that are having children that do not have the capacity to serve as parents, and the very absence of a real planned strategy for making sure that young people have the capacity to both mature as adults and also perform the task of parenting.

I mean by coming to school prepared to learn—strong mandated early childhood education programs for children between the ages of 2 and 5.

Representative SCHEUER. You would start out in the second year?

Mr. HAMER. I would start out in the second year. People talk about the third year, but anybody who can afford it, it is my point of view—and I think the evidence will support it—that anyone who can afford it and who has high aspirations for their children buy an early childhood education experience starting at 2 years old.

Representative SCHEUER. I enjoyed the best of that Head Start Program when I was a kid. It wasn't freely available. My parents had to buy it. Thank God they were able to afford that. It was an enriched preschool experience, not very different from Head Start today, and it was half a century before.

It makes one wonder. You hear the expression "Local people know best." Now, it has been perfectly obvious that a Head Start experience has been valuable because parents have been purchasing it, when they could afford it, for more than half a century. I am talking about since the middle nineteen twenties. That was 60 years ago that my parents purchased it for me.

And then under the Elementary and Secondary Education Act that Gus Hawkins helped to pioneer, we created the Head Start Program under Title I which goes back 20 years. It was my freshman year in Congress that we passed ESEA, and the Head Start Program was a diadem in the crown of the poverty program. It was beautiful. Everybody recognized it, but we treated it, our great success, like we treated our failures.

Some of these kids who are in their late teens and early 20's have been in real trouble for a long time. Society has failed these kids for a long time, and they have gotten into deep trouble.

So that is a very tough scene that you see. But these Head Start kids are innocent and they are beautiful. Why don't we treat those successful programs like the Head Start Program, as though we were proud of them?

If all those local people know best, why don't they automatically extend the school-year down to the second year of a child's life so that it doesn't depend on parents' ability to buy an enriched preschool program?

Somebody would have to prove to me that it really is true that local people know best.

I am sorry to interrupt you, but it is so right. The middle-class parents have been doing this for 60 years, and I am the proof of it. Why the heck can't this country grab the meetle and decide that an enriched preschool educational experience starting in year 2 is good for everybody, not just kids whose parents can afford to buy it? Why haven't we done this?

Look, I don't mean to interrupt you. Finish your testimony.

Mr. **Hamer**. No, I appreciate your enthusiasm about this item because it is the cornerstone of my point.

That is what I mean by children coming to school prepared to learn.

You will probably be further surprised to learn that there are too many jurisdictions around the State of New York certainly and around the country where kindergarten is not mandated. Some kids can actually stay out of school until they are ready to start first grade.

I would argue that we have a mandated kindergarten provision so that every kid in the country is going to kindergarten prior to beginning first grade.

The other items that have to do with children going to school prepared to learn have to do with such things as hunger, illness, and the proliferation of these conditions. There's still too much. It makes the job more difficult.

I still stick by the notion that we practitioners have to play the hand that we have been dealt, but it would be much more proactive, much more positive, much more promising if the kids came to school less hungry, less ill, less infested by lead poisoning, and had a place to really live.

This homeless problem is a problem that is increasingly difficult for practitioners to deal with, and we really need to figure those things out and respond to them. There are some things that have happened from the Federal level that you have already alluded to that have been very promising and encouraging.

At least one of them is in the wind right now, and that is reauthorization of what is now S. 373, the Education Consolidation and Improvement Act, which was H.R. 5. I think it has moved through the House quite successfully.

The importance of this particular piece of legislation cannot be overemphasized by me, a course which provides extraordinarily compensatory educational programs for young people, some of which were referred to by Ms. Topps when she talked about remediation for young people. This particular legislation provides important resources for the purposes of remediation and supporting young people.

But the new legislation, the reauthorization, is of particular importance because in addition to the remedial opportunities it provides, it also provides resources for planned improvement, in my judgment the newest innovation in education over the last 10 years and perhaps the most promising. Essentially it goes something like this—tell us how you are going to make the improvement a collaborative effort between the school personnel, the home, and the general community, and let's lay out specific objectives as to how we come up with the 50 percent reduction in the dropout rate or improving the completion rate in New York State, where we really had planned improvement strategy layout courses, and we have won the task of doing that.

The legislation before you and your colleagues in the form of the Education Consolidation and Improvement Act offers an opportunity for the Federal Government to support what is going on in local jurisdictions around the country, and I would dare say the legislation is absolutely vital to trying to stimulate that kind of planned improvement in local jurisdictions.

And so one way to respond to you, sir, with regard to the local initiative is that a piece of legislation such as the Consolidation and Improvement Act is a way of your saying to the local jurisdiction, "get your act together with regard to improving what goes on in the school place, and we will give you some incentives."

I think your colleagues here in Washington and the staff here in Washington have done a terrific job in framing this particular act, and I encourage its passage and any support you can provide for it with regard to student achievement and performance.

It is not enough to increase the rate of completion. All too often we now recognize that young people who come out of school have a certificate, but that is all. They do not have the capacity to compute, do not have the leadership that is essential to learn the skills to go on to postsecondary schools.

Representative SCHEUER. And frequently they can't read the certificate.

Mr. HAMER. And frequently they can't read the certificate.

So the discussion about high school completion, (A) cannot be seen in isolation from everything else that goes on in the school experience and, (B) it cannot be limited to getting the kid out of school with a certificate. It has to go much further than that and make sure that we produce young people capable of performing tasks essential to their own individual well-being and society in general.

Thank you, Mr. Chairman.

Representative SCHEUER. Thank you, Mr. Hamer.

[The prepared statement of Mr. Hamer follows:]

PREPARED STATEMENT OF IRVING HAMER

Walt Whitman wrote in Leaves of Grass, "Do I contradict myself? Very well then I contradict myself, (I am large, I contain multitudes.)"

Ostensibly, Mr. Whitman was writing about himself, but he could have been writing about America. We are a large nation, abundant in natural, human, and man-made resources. We are a nation of multitudes, an ingathering of the peoples of the world pursuing dreams of liberty and opportunity. America is a land of contradictions, a land of unparalleled prosperity, unsurpassed in the breadth of its achievement. Yet, amidst that prosperity and achievement there are depths of poverty and despair that shame us all.

Our educational system reflects the contradictions of our nation. We provide some of our children with the best education in the world while providing others with the most inadequate education of any industrialized nation. Far too many of our children do not have access to the early beginnings so essential to the developmental skills necessary for high school completion. The tension between access, equity and excellence and the national failure to close the cracks in our educational system created by this tension has contributed to America's worldwide loss of industrial and technological dominance. The inability of our educational system to prepare workers properly threatens the nation's future stability.

My purpose in testifying before you today is twofold. First, to speak about what we educators, particularly in New York State, are doing to try to ensure that students complete high school and graduate with the basic skills necessary to be able to adapt to the ever changing work place. Second, to suggest measures that the Federal government can take to help educators achieve this goal.

In New York State we start from the premise that all children can learn and therefore all children, except those few who may be severely disabled, can learn the skills and knowledge required for high school completion. Failure is not inevitable and it is not acceptable.

You requested that I speak about the causes of students dropping out. By this I assume that you want me to talk about the macro, i.e. the societal, reasons why so many of our students do not complete high school. These reasons are important to you and I hope to address them later in my testimony, but as an educator the only way I can do my job effectively is to take the position that the reason a student leaves school is because the school has failed to engage him. It is the responsibility of the school to provide the proper learning environment and employ the appropriate teaching strategies to enable each student to succeed.

Students, of course, cannot be absolved of all responsibility for the degree to which they achieve. Nor are you as policy makers devoid of responsibility for developing policies that encourage learning and support the family. Notwithstanding this, however, we educators must, so to speak, "play the hand that we are dealt." This means we must constantly adjust the schooling experience so that it matches the way students live their lives. Schools must be places of change. There must be constant evolution in the way schools are organized and structured, the content of curriculum, the modes of delivering instruction and the types of support provided different students.

Before I proceed I want to clarify an important semantic distinction. I discuss this problem in terms of increasing high school completions rather than in terms of dropout prevention. This is more than simply wanting to substitute a new phrase for one that has taken on a pejorative connotation. Too often when a student has his education interrupted it is thought that the student has irretrievably lost the opportunity to graduate. It is as if the student has dropped out of an airplane. There is only the step out of the plane and then the long descent. We believe that students who leave school have paused in their education; there must be structured opportunities to return to school to complete what was left unfinished. This may mean 13, 14 or 15 years of school enrollment before completion.

In New York City, we know that many of our students will be at least one year behind, chronologically, by the time they reach 10th grade. There will be pregnancy, there will be the need to work 20, 30, 40 hours a week to support themselves and help their families. There will be students going off to the streets and going off to jail. We must not think of these students as dropouts. We know that within one year of these young people leaving school, most of them will have realized that they have made a mistake. But they will not come back as 18, 19, 20 year-olds to accumulate years of credit in classes with students much younger than themselves. We can help these students, but we can do so only by recognizing the reality of their lives and structuring our educational programs to respond to their different needs.

In 1986 the State Education Department began an intensive review of strategies for increasing high school completion rates. Department staff consulted with practitioners and researchers and held conferences throughout the State that were attended by over 3,000 persons representing schools, universities, business, industry and civic organizations. Out of this work, the Board of Regents developed a working paper on a framework for action to increase high school completion rates. This paper identifies nine framework elements and constitute a comprehensive strategy that school districts can use to increase high school completions. I would like to briefly share with you what the elements of the framework are.

First, all students need to be provided with a sense of identity and self-esteem. This can be done by providing students with opportunities to study their heritage and culture and by giving them opportunities to succeed.

Second, we must focus on preventing students from reaching high school with debilitating educational problems. Students who are at risk must be identified and helped before they reach high school. Quality early childhood programs, such as Head Start, that emphasize a developmental approach to learning are a key prevention strategy.

Third, in order to effectively intervene, we must improve our identification and assessment of at risk youth. Schools must examine the characteristics of their students to determine if they are at risk. Once a student has been so identified, the school must determine the kind of programs and services that are needed to meet the cognitive, affective and life needs of the student.

Fourth, we must identify and disseminate model programs and services to schools. School districts across the country have recognized the problem of youth at risk and have implemented successful programs. We must encourage schools to adopt these programs that have proven successful. The United States Department of Education's National Diffusion Network, if expanded, would give us a mechanism through which to start this work.

Fifth, we must provide teachers with the preservice and inservice training they need to tailor instruction to meet the individual, social, and culture needs of the entire population of our students. Each student's background and culture must be valued and understood. To fail to do so is to invite poor achievement and completion rates. Individualized learning, mastery learning, and alternative schools are some of the ways that we can match the mode of instruction to the need of the student.

Sixth, we must work closely with parents to make sure that they are involved in their children's education. Parents are children's first teachers. After children pass primary school age, parents need to continue to be involved in educating their children. Research shows us that providing parents with opportunities to be involved in their children's education is one of the most important steps we can take to increase opportunities for children to succeed. One way to insure parental involvement is to install systemwide policy and practice that require it. In addition, parent centers and home-school workers are very effective supports for parents.

The seventh strategy is a corollary of the sixth. Schools should be the focus of community life. In too many communities schools are open only half the time and three fourths of the year. Schools and the community must work together to improve school programs and invigorate the social, cultural and economic life of the community.

As I mentioned earlier, the changing nature of our society means that many students are going to leave school despite our best efforts. But they need not remain cut off from education. The eighth strategy is to develop innovative programs to reach out-of-school youth. In New York we are exploring several alternative strategies including a structured leave of absence, transitional preparation programs, and making diploma programs available at times other than during the traditional school day.

The last strategy is to have schools implement the characteristics of effective schools that have been identified by research. We know that effective schools are ones that have strong administrative leadership; are orderly and have positive school climates; have clear academic goals and clearly defined curricula; monitor student progress; provide rewards and incentives for students and teachers; and encourage student, parent, and community involvement in learning. Schools must involve the entire educational community in developing comprehensive school improvement plans that detail how the school will implement the correlates of effective schools.

During our recent conferences around New York State concerning this topic, we learned many things. Among the most important is that student mobility is a primary contributor to students falling behind and not completing school. The installation of a Statewide student information databank will make it possible for each of the State's 6,000 schools to have prompt, basic information on students moving between districts and schools. Mobility, usually a function of poverty, dislocates a student in the educational scheme of things. A student information system will help relieve this condition.

Of course, a primary purpose of schooling is to effect student achievement so that society and the individual will benefit. High student achievement does not result from minimum expectations or standards. Nor does poor teacher preparation or classroom instruction stimulate achievement and high school completion. In this regard, New York State has strengthened its graduation requirements, begun to make its teacher certification requirements more rigorous and initiated review and revision of State syllabi so that curriculum more appropriately reflect the diversity of the State.

These strategies work, but they work better if children come to school ready to learn. Herein lies yet another contradiction.

Through our social security system, we have made great strides to provide our nation's senior citizens with dignity. We have attempted to reward them commensurate with their hard work in building this nation. But we have done shockingly little to invest in our future. Prenatal care, parent education programs, day care and early childhood programs, infant nutrition and health programs - these are not expenses, they are dollars invested in our future that we know will be returned to us many fold. It is not only morally right to expand these programs, it is economically justifiable to do so. To do less is self destructive.

A national child development policy and program, that sets minimum standards below which no child should go, is a key responsibility of the Federal Government. Currently, our country has the least comprehensive child care policy and program of any western industrialized nation. Our infant mortality rates are extraordinary. Early childhood education is still mostly a privilege of the well to do despite what we know it does for all children. There continues to be too much hunger, illness, lead poisoning and homelessness among children. These conditions contribute to children leaving school and the Federal Government can and must do something to end such contradictions.

We are here today to talk about our international competitiveness. To be competitive we need to have a strong national infrastructure. Our infrastructure begins with our children. If they do not grow up strong and healthy our nation cannot hope to maintain its strength and health.

Another of our great American poets, Langston Hughes, has written, "What happens to a dream deferred? Does it fester like a boil, or dry up like a raisin in the sun?" Let us not defer any longer our dreams for our children or our children's dreams.

Let us work together as one nation to ensure the conditions for our children to learn so that they will be well prepared to build the America of tomorrow.

Representative SCHEUER. Thank you very much for this remarkable panel. You have given us a great deal to think about in the hearings that we are having. We can bring ideas to the floor. We can air them and discuss them, but the legislative committee in this area is the Education and Labor Committee. Both aspects of that jurisdication are totally appropriate to this series of hearings, of how we make kids into effective, competent workers so that we and they can be competitive.

We are very fortunate to have with us the chairman of the Education and Labor Committee, the distinguished Congressman Gus Hawkins of California, who has been such a pioneer and such a thoughtful, creative, innovative legislator in education and labor, and so I take pleasure in yielding for some guidance he may heed.

Representative HAWKINS. Let me agree with you that this panel has been outstanding, and I think the many ideas and suggestions have been very helpful.

I am very pleased that we ended up referring to H.R. 5 on the House side, which is now in the Senate, because I think it does contain many of the recommendations of the appropriations, if not canceled out by the attempt to reach the targets that are now set in the budget, would be a tremendous boost to many of the ideas that you have recomended today.

Mr. Hamer, I am not quite clear about some of the points that you make. Let me begin by seeking some clarification of a few points because I thought you made some excellent ones.

You ended up by indicating that it was important that students come to school prepared to learn. I wasn't sure what you meant by that. Did you mean, that they have to come with preschool programs, which I consider to be school programs that would be the responsibility of the schools and not of the family.

What I am trying to see is whether or not you make a distinction between family background, or do you place greater responsibility on the schools to teach children as opposed to the earlier concepts advocated by such individuals as Coleman, who primarily indicated that it was a family background that determined the quality of the school or the achievement of its students.

Now, which of those schools of thought are you advocating? You did quote Edmonds on the other hand, who was a strong advocate of placing the responsibility on the schools. As a matter of fact, the characteristics that you enumerated which define an effective school did not even include parental involvement?

Mr. HAMER. Right.

Representative HAWKINS. And you left that out on the basis that it would shift responsibility from the school to the family and repudiate the idea that the school did make a difference, that it was the family background. It would seem to me that that is one of the contradictions that you included.

But then you said coming to school prepared to learn, and I wasn't so sure whether or not that, in itself, indicated that children should come better prepared and that the school would use that as an excuse for not doing the things that the school should do as professionals.

Mr. **Hamer**. I think you raise a very important distinction. I will try my best to be absoultely clear about my own disposition of what I think should be the case.

Quite clearly I am predisposed to the notion that the school place has responsibilities, and we cannot accept the proposition that family background is the sole determinant or the primary determinant in student achievement. We have far too many incidents, far too much data to suggest that children who come from a variety of family backgrounds have the capacity to achieve, and to cite that as a single example, a single reason for nonperformance in school I think is now bogus. I think there is data to support that.

What I mean by coming to school prepared to learn is——

Representative **Hawkins**. Are you referring to entering first grade?

Mr. **Hamer**. Yes, beginning what I would call the development sequence; that is, each year stacked on another year. Grade 1, grade 2, and grade 3.

In fact, I have a predisposition with regard to how we might organize some of the better preschool or early grade intervention strategies before kids really start the development sequence.

We are really not talking development sequence. They are not taking tests and they are not moving from grade 1 to grade 2 when they are 2 years old and 3 years old. What we are talking about doing at the grade level or at that level of experience is modal development, sensory development, perception of issues that kids ought to work with, have a sense of belonging to a group.

I heard Ms. Fordham talk about the importance of group collaboration and working, but how do you get into a group situation?

These are skills that ought to be learned before a youngster walks into grade 1, and the way they get developed, in my judgment, is perhaps at home but not necessarily and certainly not singularly any more.

Sixty years ago it seemed that that could be done, but it can't be done now.

Representative **Hawkins**. Aren't we in effect saying that at grade 1 a child should have all the prerequisites in terms of skills comparable to that of other children and again at grade 1, at grade level, and then should be competently guided all the way through that child's education?

Mr. **Hamer**. Yes, sir.

Representative **Hawkins**. And if that man or that woman is at grade level when they get to Ms. Topps' high school, they would not be several grades behind or over age and would not then have to try to remediate what should have been done at an earlier grade?

Mr. **Hamer**. Right.

Representative **Hawkins**. So that we then get into the question of—and I think you did refer to exemplary programs that have identified—and I think Mr. Edmonds did do exactly that—he identified minority schools and low-income schools that did achieve above the national average, and he identified characteristics of those.

That seems to be going on in a lot of places. I visited, not too long ago, Brooklyn, and my friend Jerome Harris—you may know him——

Mr. HAMER. Very well, sir.

Representative HAWKINS. I think he is doing a remarkable job in a very hostile circumstance, almost hostile, but having children—black children exceeding the national average.

And there are many such schools—not enough, but there are a great number around the country. We have tried to identify those on my committee. Those exemplary programs do exist in many school districts.

Now, whose job do you think it is to identify such exemplary programs and to encourage them, because it seems to me that that is precisely what we aren't doing?

Mr. HAMER. Right.

Representative HAWKINS. We are experimenting in Los Angeles, for example, starting at zero, reinventing the wheel type of approach. I know many school districts that we visited around the country who are experimenting in many ways, and it seemed to me that they were wasting a lot of money on experimentation when we already have some successful programs that need to be models and could be. It seems to me that we could learn from one school to the other and this might be the responsibility of the Department of Education to identify and to encourage such development.

Would you agree?

Mr. HAMER. I absolutely would agree. There has been some of that in place at the Department of Education through its national network. The problem is they have not had the capacity in recent years to really do the validation of the exemplary programs.

I see the responsibility as resting primarily on the Department of Education here in Washington. I also see the State education departments as being similarly responsible for getting the word out.

In my judgment, it is twofold. I think you point out the right first point, which is that we really can do this work, and there are some things going on around the country that are very proactive and very productive with regard to students in distress, minority students in distress particularly.

But there is another reason, sir, that it is important to get the word out and do a much better job at identifying exemplary programs that actually work with students that are supposedly hard to educate, and the other reason, which is equally as powerful in my judgment, is that there is a lament, a pervasive belief that if you live in the ghetto, that if you are poor, that if you are a person of color, that you cannot learn. You come from dire situations, and you cannot learn and/or achieve.

And what the evidence clearly establishes is that that is not the case, and we are having one hell of a time getting the message out that we know a lot about what we can and should be doing in schools for all children generally, but specifically we know an awful lot about what to do about children in distress that come from minority backgrounds, be they single parent households or households in poverty.

We know a lot about how to do that, and it is real difficult to get the media and persons, my colleagues in the State education department, public officials, elected officials to understand that there are the Jerome Harrises of the world, that we do get an extraordinary amount of work done with students in distress and we need to replicate and distribute and disseminate the models created by such pioneers.

But in addition, we need to change the mindset of people with regard to what is possible. It is just simply not acceptable that we cannot educate the young people that people accuse us of not being able to educate. We can in fact educate them.

Representative HAWKINS. Well, of course that is what Mr. Edmonds said. It isn't education; it is politics. The politics of it is that the resources of low-income areas—the teachers are not as competent as they are to teach in the more affluent neighborhoods, the resources are not there, and the expectation is not there, and so the assumptions of genetic inferiority.

Mr. HAMER. Right.

Representative HAWKINS. The kids are not expected to learn, and that is the message that they get, and they end up being shortchanged, and there is every reason why they become discouraged and drop out.

The same is true of Hispanic kids who are taught in their own language and don't know what is going on in the classroom and see no particular reason to sit there and listen to what they don't understand. So those things are, I think, very political in nature and not a matter of education.

Not very much has been said today about the programs that we feel have proved to be successful. I think the chairman referred to Head Start and compensatory education, bilingual, and so forth, and I think the point was well made.

What is happening to us, because we know that Head Start succeeded and we know that it is highly supported, very popular, and yet among those who are entitled to it only about 18 percent of the cases obtained the benefits of Head Start.

We have included that in H.R. 5 as well as stressing compensatory education in high school.

Ms. Topps, I wanted to ask you because I am sure that at the high school level that compensatory education, chapter 1 and chapter 2 are not generally being used across the country because there isn't that much money and most school districts concentrate it on the elementary grades, and that possibly is a good investment because that is where it is needed the most.

But do you find it generally being used at the high school level?

We have had a great problem with trying to find out why it is that these kids who even had Head Start sometimes lose some of their skills when they reach the high school level.

Ms. TOPPS. I currently work in a school which does not qualify for chapter 1 funds. Even though it is a predominantly black school, we do not meet the criteria for having the percentage of young people who populate it fall in the economic group required for service.

I have worked in a junior high school where chapter 1 funds were available. I believe that it was most helpful for those young people. Ninety percent of them came from a public housing project.

We found that the remediation associated with that effort was indeed needed and was productive.

Representative HAWKINS. I think Ms. Fordham referred to images and role models, as did Mr. Hamer. Yet some of you have suggested increasing standards. I think, Ms. Topps, you suggested lengthening the school day possibly, or at least compulsory school age to 18.

Under the current situation in which we seem more concerned about saving dollars in the budget than we are about expending money on education, especially early childhood education, what will be the effect of increasing standards, lengthening the school day or the length of time that a kid stays in school? Isn't it likely to increase the dropouts if you demand much more of the students without providing the resources?

You are talking about students who didn't have Head Start and you are talking about students who were deprived of compensatory education and who had family backgrounds where they didn't get any help from their families. Now, suddenly in the reform movement throughout America, you are talking about doing all these things, increasing standards for teachers, testing them, and so forth. In Maryland, over half of the black teachers already teaching in Maryland flunked out. So you are not going to have black teachers in many of the classrooms if you continue along that particular line.

What do you suggest in terms of meeting the increasing requirements in education at the same time you are decreasing the resources to deal with the problems that such increased standards and higher testing requirements will provide in our school system? Can we afford to do both?

It seems to me that we are headed down the wrong road fast and it is not going to help the very students that we are trying to help.

Maybe you could respond to that, Mr. Holman.

Mr. HOLMAN. I suppose what I had better do is clarify something. I feel sort of like a salamander here. We basically have practitioners and scholars. The National Urban Coalition cannot claim that we are either. We serve as advocates and mediators between and among scholars, practitioners, and policymakers. We run programs, among them "Say Yes to a Youngster's Future" program. We sent to you gentlemen in Congress a message which your aides may or may not have received yet.

Our board meeting last week pointed out that we are at a very critical time because we are facing a situation now in which indeed you are trying to wrestle with the two deficits. You hve got a an named Henry Kaufman on Wall Street who said, buried somewhere in the New York Times some years ago, that we Americans make the mistake of thinking that the problem of the future of this country is a problem of finance capital. That's wrong. The problem that this country faces is a problem of human capital and particularly and specifically the problem which relates to blacks and Hispanics in the ghettos and barrios of this country.

We listen to Mr. Kaufman when he talks about whether the market goes up or down, but we didn't listen to him in terms of that.

I am not very sanguine, frankly, that much of what has been said today will be taken to heart as you start looking at that budget. Because if it were, both the executive branch and the legislature would be saying there are only two significant things that must be saved no matter what. One is that you must save whatever leads to economic growth and job creation. Not the creation of millions of dollars for people in buying out companies that don't produce anything, but economic growth and jobs.

The other thing you would be saying is that it is critical to understand what this gentleman from Bonn said the other day: "Suppose we did try to help America and talk about buying some things from them. Aside from some high tech stuff, what do they make that we feel is good enough for us to want to buy?"

It seems to me that the mistake we make is in focusing on black and Hispanic young people as though they are the problems rather than the potential solution. That is why we don't put more money into Head Start, because it doesn't help anybody but those youngsters.

I want to go back to what I said to start with. It has not sunk into the heads of the policymakers who are so isolated from the problem that 40 percent of the young people of the year 2000 are going to be black and Hispanic and they are in schools of the kinds we are talking about. It is nonsensical to talk about productivity if you are not going to think about how you are going to educate those young people.

I go to cities where people who don't have children in the public schools vote down school programs over and over again. The great myth of the wisdom of localism. They vote these things down. But we say let's take care of Social Security; let's not even touch Social Security even in terms of people who don't really need those benefits.

But consider one other fact. Within the first 25 years of the new century anybody here who is on Social Security will be depending on three workers to support him or her. One or more of those workers will be black or Hispanic. The more poorly educated they are the more quickly we are going to see that England may not be alone and within a matter of decades learning how you move from being a primary nation to a second-class nation.

I see no urgency where this is concerned. I see the same nonsense about bottom line, which really talks about what can we do this quarter or this funding cycle, and as we continue to do this we are creating a situation in which you have to agree with the comic strip character: "We have met the enemy and it is us."

I would like to say one final thing about what this excellent piece of work that the young anthropologist has done. I sometimes wonder what would happen if someone would suggest in New York City, which has more than a few blacks, that once a year let's paint a black strip down Fifth Avenue and let's have all the blacks march down there. Suddenly you begin to hear some strange kinds of things about isn't this kind of racist, isn't this kind of singling out?

The truth of the matter is this country always has been a country of many different cultures. We don't behave as though we are. What we are doing in the "Say Yes to a Youngster's Future" is putting together what I got in my high school. In my high school I had the pictures of Langston Hughes, Sterling Brown, all these people from the past who were black, because I as a black kid could learn that I was a dual citizen in this country, that I am both of Afro-american heritage and it is not something to be ashamed of, and I am a part of the total American culture.

We have black, white, and other kids who don't realize that when they talk about the United States, when they talk about the capital, they talk about L'Enfant, and a lot of people don't even talk anymore about Benjamin Banneker, who also was responsible for the laying out of this capital city.

I was in a church where I learned from a woman named Henseon that her uncle was the first person to set foot on the North Pole. People laughed at that, because everyone knew Mr. Perry was the one who had done that. It turns out that was not the case.

When you listen to our officials who are running for the presidency now it is very clear that here is a country which is in crisis, that doesn't seem to realize that it is, and ekes out just a little bit to try to placate.

It is criminal that teachers should have to teach in the kinds of situations they are. We are waiting now for all the teachers to get perfect and then we are going to raise their salaries. Nobody would ever work that way in terms of anything that they took seriously.

I would like to close with a reference to something that happened in New York City some time ago. We were holding some conferences and a young black man said, "I grew up in New York City. My mother was a social worker. She called one day and told me to leave my school and go downtown and pick up an entry form for something called the Bronx High School of Science. I didn't even know what she was talking about."

Being a smart mother, within a half hour she called back again, and sure enough, he hadn't gone. She indicated certain things which might happen thereafter, and he went.

He got into the Bronx High School. He was working like mad, studying. I've done it. I did it at the University of Chicago. I did it at Yale. I'm there by myself and I am working and I am studying and I am doing the best that I can. And managed, because you can learn to survive. That isn't a perfect way to do it.

He is sitting in class one day and the class was largely Jewish. He is sitting in class one day and a problem is being worked on. One young man says to the teacher, "Do we solve this problem the same way we did when we were going through it at Yeshiva?" People looked kind of embarrassed. He said, "What is that?"

They were doing a very legitimate thing. Group learning for certain cultures—lawyers wouldn't make it if they didn't know how to do this—is very, very important. I would agree with everyone here. We know enough about what it takes to get these young people to learn. We know the importance of the limits and the possibilities. There are no incentives of any strength and power when you get Mr. Weinberger to chide a woman and say, "You're wrong. I have never said that Head Start didn't work. Why aren't we doing something about it?"

So my great problem is that as long as we take a shortsighted, penny-pinching approach to the most significant thing that we have got going for us, which is the young people who are going to make our future, I am not very sanguine that we are going to wind up any differently. In other words, we are back to this old thing that if we continue moving in the direction that we have taken, we inevitably will wind up where we are going, and I don't think that is too great.

Representative **Hawkins**. I yield back my time. I certainly appreciate this, Jim. You have indicated several times that my committee is a committee that has legislative authority, but I think it is most important at the same time that education be tied in with the work of the Joint Economic Committee, because then it is related to the economic policies and the economic progress of the country. I think that would be the great contribution that you and these hearings can make to the Joint Economic Committee, and so I am happy to be invited to sit in on this subcommittee. I think it will be very helpful when we begin to try to reshape the economic policies of the Nation so that education will play its proper role.

Representative **Scheuer**. Thank you very much, Congressman, and thanks to this wonderful panel.

We have been here just 15 minutes short of 3 hours. I want to thank you for your patience and your tolerance. I think we are going to have a rollcall vote pretty soon, but Congressman Hawkins and I will continue to ask questions until that rollcall vote.

You have certainly given us an enormous amount to chew on.

I am going to ask just a few haphazard questions scattered across the four of you.

Mr. Holman, you mentioned in the course of your testimony that when you were in school the principal without any advance notice, asked the honor students to come forward, and you all did come forward. You mentioned that today if that were to happen a lot of them would stay in their seats; they wouldn't want to be identified as education achievers. How did that change take place and what does it mean? What do we do about it?

Mr. **Holman**. I think there are two factors that are operational there.

I quite agree with Ms. Fordham. My sister did it in her low-income school where she is teaching, in the neighborhood we grew up in. Most of the other folks have left it. It comes right back to our heritage. They were encouraged to work together on science projects. Ultimately it turned out that because of the rules they had to do individual projects, but the learning was a group kind of learning. They went on to win science fair prizes over and over again against all comers.

One of the things I am trying to say by saying that is that there is a good and a bad, that one of the things that is happening is that we have not encouraged a group feeling that learning is important and something that everybody can participate in.

One young woman said in a high school here that she was not going to join the black student union because, as she says, "I'm mainstreaming." You are seen as mainstreaming or, as they call it, trying to be white. Learning has come to be seen as that. One of the things you have to do is to try to change those heads.

It has to do not only with what you do with programs but what you do with perceptions. I keep trying to say to some of these businessmen who will adopt a high school or who will run an engineering program but will not give incentives to youngsters at the elementary school level because they are achieving and will not say which class did the best job of this that we have got to somehow build the sense that learning and learning together is something which is valuable and something which is worthwhile.

Representative **Scheuer**. Isn't that one of the functions of a preschool program, to help kids understand that they are functioning in a group and that a group is self-enhancing? It enhances the dignity and the prospects of every member of that group. About the only thing I remember from my Head Start experience 60-odd years ago was that they taught us to relate to each other. This was the first time a number of us had ever been with a dozen or a dozen and a half other kids. Isn't that as important a purpose as any of the preschool experience?

Mr. **Holman**. You have got to reward it.

Mr. **Hamer**. Yes, you really do have to reward it.

Representative **Scheuer**. How do you reward it?

Mr. **Hamer**. You support it. The evidence teaches us that a couple of things happen. You can have that kind of preschool experience, but when you get into the developmental sequence that sort of collaboration begins to disappear. One of the early skills we all learn is how to be in the group, but when you get into the first grade folks begin to teach you how to be an individual. It is a very important point, because in lots of ways it cuts across cultural differences between people. Not weaknesses, but differences that ought to show up in school.

You mentioned the flap that I got into in New York State. I got into the flap because I have argued and argued in that publication that there are cultural differences between people and that these are not deficits or liabilities, that these instead are characteristics that (*a*) need to be understood and (*b*) need to be manifested in a classroom situation.

We are in an interesting time in the history of the country. There was a time when you couldn't talk about race at all significantly without being labeled a racist. Perhaps an unfortunate or fortunate claim to fame that I have is now being called a statewide racist. I am a racist because I advance the proposition that there are cultural differences that need to be taken into account in the classroom situation, that teachers and principals and superintendents needed to understand those things.

When you asked your question about what is the ethos of the school, you are asking a cultural question. The only way that you can respond and support it is to have people in the school recognize that such an ethos exists. Whether you acknowledge it or not, it is there. The way in which you do your work expresses what is the ethos. If you try to get kids to deal independently, individually and to not have a common concern about the other people inside that classroom, it runs contrary to what goes on in some communities and lots of communities that are in a predicament.

Representative **Hawkins**. Wouldn't it be true that if a child is brought up to believe that that child has music in his or bones and can tap dance and be an entertainer that that child will take up those values and will be cultivated throughout life to believe that

that is what that child is destined to become? Whereas a child who may, let's say, be exposed to problem solving and things that are reasoning in nature, more intellectual, will perhaps value intellectual development more than physical development and would probably end up being a better student?

I have simplified it a great deal, but wouldn't that be true? If you go into an average school in my district you are going to see a lot of children tap dancing and running around the football field and engaging in athletics. From the very beginning throughout life this is built into that child, so the child becomes that product. It isn't that it is natural or genetic; it is that that child is brought up to see values in a different light.

Am I wrong?

Mr. **Hamer**. I think you are probably right. I think what we do by way of reinforcing, which is what I call supporting the ethos or the culture of a child's development, can take a variety of forms. If a child is encouraged to engage in discussion, as Ms. Topps points out, they learn to speak. If they are not encouraged to participate in discussion at an early age, they don't acquire that skill.

There are, sir, some qualities that are not fixed in time or in space, but they do come from a cultural background and experience that can be changed, that can be built upon. To the extent that kids come to school with inappropriate behaviors that are part of their culture, like belligerence, it may be that in some communities belligerence and boisterousness may be a part of the cultural reality. They are not fixed. That is the key point about what it is that kids come to school with, that none of the cultural characteristics are locked. They are commutable.

Mr. **Holman**. It hasn't stopped Jabbar. A fantastic athlete who was a fantastic student. That is why we are trying to use him.

Representative **Scheuer**. This has been an absolutely wonderful hearing. You have stimulated us and you have enriched us and we are very grateful to you. I wish we could continue all afternoon. We do have a vote now.

We are very grateful to you for coming, Congressman Hawkins. We appreciate it very much.

This is a wonderful hearing. You have our grateful thanks for your contribution to our learning and our understanding this morning.

The subcommittee is adjourned.

[Whereupon, at 12:20 p.m., the subcommittee adjourned, subject to the call of the Chair.]

COMPETITIVENESS AND THE QUALITY OF THE AMERICAN WORK FORCE

THURSDAY, NOVEMBER 19, 1987

Congress of the United States,
Subcommittee on Education and Health
of the Joint Economic Committee,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:40 a.m., in room 2359, Rayburn House Office Building, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Present: Representative Scheuer.

Also present: Deborah Matz and Dayna Hutchings, professional staff members.

Representative **Scheuer**. This is the eighth day of hearings on "Competitiveness and the Quality of the American Work Force."

This is going to be a bit of a hectic day. We have Senator Mikulski here, and so I am going to defer my opening statement and place it in the hearing record. Also, Senator D'Amato has requested that his opening statement be placed in the record. He could not be present due to another commitment.

[The written opening statements of Representative Scheuer and Senator D'Amato follow:]

WRITTEN OPENING STATEMENT OF REPRESENTATIVE SCHEUER, CHAIRMAN

It is a pleasure to welcome today's witnesses. This is the eighth day in our set of hearings on "Competitiveness and the Quality of the American Workforce".

Today we will examine the issue of Retraining the Workforce: The Hardcore Unemployed. By hardcore unemployed we are talking about those individuals who, because they lack adequate education and/or training, cannot find jobs even when the economy is robust. For these people there exists a chronic mismatch between their abilities on the one hand and the skill needs of industry on the other.

Some of these people were previously employed but because of changes in technology or changes in the economy--such as the closing of steel mills--their skills are obsolete. Others, may be capable of and willing to work but live in areas where there is a shortage of jobs. Still others may be so seriously under-educated that there are few jobs for which they qualify.

This latter group is particularly troubling because of the host of problems with which they are often confronted--drugs, teenage pregnancy, illiteracy and the like. These are individuals for whom the system has failed. Yet, it is unthinkable to simply accept this situation as it is.

This hearing will explore ways to reach these so-called hardcore unemployed and to provide them with the necessary education and skills to make them meaningful members of the workforce.

WRITTEN OPENING STATEMENT OF SENATOR D'AMATO

"RETRAINING THE WORKFORCE: THE HARDCORE UNEMPLOYED"

MR. CHAIRMAN, IT IS A PLEASURE TO CONTRIBUTE TO THIS VERY IMPORTANT HEARING, THE SEVENTH IN A SERIES OF EIGHT HEARINGS THIS SUBCOMMITTEE IS HOLDING TO DISCUSS STRENGTHENING THE LINKS AMONG EDUCATION, JOB TRAINING, AND THE HEALTH AND COMPETITIVENESS OF THE U.S. ECONOMY.

PRESENTLY A LARGE NUMBER OF AMERICAN WORKERS ARE FINDING THEIR SKILLS DO NOT MATCH THE TYPES OF JOBS OUR ECONOMY NEEDS. FOR THE REMAINDER OF THE 1980s AND INTO THE 1990s, WE NEED TO RETRAIN OUR WORKERS TO COMPETE AGAINST THOSE OF OTHER COUNTRIES. OUR GOVERNMENT MUST PROVIDE INCENTIVES TO BOLSTER OUR SKILL BASE IN THE WORKPLACE.

THE 100TH CONGRESS HAS ALREADY TAKEN ACTION TO ENACT MAJOR CHANGES IN EMPLOYMENT AND TRAINING PROGRAMS FOR THREE GROUPS OF WORKERS WITH PERSISTENT EMPLOYMENT PROBLEMS: DISADVANTAGED YOUTH, DISLOCATED WORKERS, AND WELFARE RECIPIENTS. I SUPPORTED THE 1987 TRADE REFORM ACT, H.R. 3, WHICH INCLUDES A PROPOSAL FOR A NEW, EXPANDED WORKER

ADJUSTMENT ASSISTANCE PROGRAM. THIS PROPOSAL WOULD AUTHORIZE $980 MILLION FOR THE EDUCATION AND RETRAINING OF DISLOCATED WORKERS.

IN THE FISCAL YEAR 1988 BUDGET, THERE IS A PROPOSAL TO EXPAND SERVICES TO DISADVANTAGED YOUTH UNDER THE JOB TRAINING PARTNERSHIP ACT (JTPA) BY CONVERTING THE EXISTING SUMMER JOB PROGRAM INTO A YEAR-ROUND REMEDIAL EDUCATION PROGRAM FOR TEENAGE WELFARE RECIPIENTS AS WELL AS A SUMMER JOBS PROGRAM FOR LOW-INCOME YOUTH. THERE ARE ALSO A NUMBER OF PROPOSALS TO AMEND THE AID TO FAMILIES WITH DEPENDENT CHILDREN (AFDC) PROGRAM TO REQUIRE GREATER PARTICIPATION IN EDUCATION AND WORK ACTIVITIES BY WELFARE RECIPIENTS. EACH OF THESE PROPOSALS ARE VITAL TO THE EMPLOYMENT NEEDS OF AMERICA'S WORKFORCE AND TO ITS CONTINUED COMPETITIVE ROLE IN A GLOBAL ECONOMY.

MR. CHAIRMAN, I LOOK FORWARD TO HEARING FROM THE EXPERT WITNESSES WHO HAVE COME BEFORE THIS SUBCOMMITTEE TODAY. THEY WILL PROVIDE THE CONGRESS WITH THE EXPERTISE NEEDED TO FORMULATE JOB TRAINING AND EDUCATION POLICY FOR THE FUTURE GROWTH OF OUR NATION.

THANK YOU.

Representative SCHEUER. At this point, I will recognize Senator Mikulski for a statement. She has a press conference with our colleague, Gus Hawkins, and who is the Senator?

Senator MIKULSKI. Senator Dodd.

Representative SCHEUER. On a great child care bill. So without any further delay, I am going to present our distinguished former colleague in the House and distinguished, dynamic freshman Senator, Barbara Mikulski.

STATEMENT OF HON. BARBARA MIKULSKI, A U.S. SENATOR FROM THE STATE OF MARYLAND

Senator MIKULSKI. Thank you, Mr. Chairman.

You have to know, as much as I love being a U.S. Senator, I miss our days and our work together on the Energy and Commerce Committee. Your day, like mine, has been poltergeisted already, so I would like to ask unanimous consent that my prepared statement be in the record.

Mr. Chairman, I wanted to come before the committee to first of all sit and listen to these most important commentaries, but at the same time to add a particular dimension.

Mr. Chairman, I agree that we need to be competitive in this country. The second thing is that we need to organize ourselves, I believe around a work force readiness strategy, and I would suggest to the committee and to my colleagues in the Congress that the way that we can get our Congress and our country ready for the future is by focusing on the year 2000, and what we need to be ready for the year 2000, at the same time paying immediate attention to our day-to-day needs.

We face, in the year 2000, the potential of a labor shortage, but the good news to that is that we face the potential of full employment in our society without centralized planning and a lot of government manipulation. We can get ready for the future, if we start now.

I want to particularly emphasize some facts. In the future there will be fewer young people available to go to work. Older workers will be expected to stay longer and women workers now are an important and critical part of the work force.

A special word about the women, which is one of the reasons I wanted to talk today. The fact that women are working outside of the home does not come as any great surprise. After all, we women have always worked in the country, whether it was the native American women who produced the first food at the first Thanksgiving, to women of color who worked in the fields, or to the ethnic women who worked in the garment factories. And today, whether we are teachers or lawyers or word processors or farmers, we work one shift in the office and another shift at home.

The work in this country, the work of women in this country has often been unrecognized, unorganized and underpaid.

As we plan our competitive strategies, we have to understand that we have families. Workers have families, not just at the annual picnic but every day, and therefore, need to take this into consideration as we plan our strategies.

Mr. Chairman, I know, as you are looking at how we can be competitive, I would stress that what we need to do is place greater emphasize right now on early childhood development, on education, to the primary and secondary area, make maximum use of our community colleges that have been a uniquely American invention. They perform an important role in our society, along with the concept of night school. We could offer a variety of services and educational opportunities that could meet every need.

At the same time, we have to also take a look at the issue of child care. Child care is no longer a woman's issue. Child care is no longer a family issue. Child care is now a business issue, and is now an American issue. We have to look at a variety of techniques to provide for child care. And I am not talking about warehousing. I am talking about child care.

Mr. Chairman, when we invest in our infrastructure, as we build new plants and industrial parks, and soon, we make sure we provide parking lot slots for cars. We can certainly provide day care slots for kids.

So as we take a look at that, I think that we have the structures in place to make it work. What we need now is the will, what we need now is the leadership at the Federal level. The Federal Government's responsibility is to provide resources to unleash the creativity of the local and State communities for there to be public/private partnerships. And I think, together, we can go into the future with an American potential developed like we have never had it before.

Mr. Chairman, having outlined this agenda, I am going to thank you for your graciousness and not want to delay the proceedings of the experts who I think really have the ideas to take this strategy that I have outlined and out into practice.

So Mr. Chairman, I yield back the time that you have given me.

And before I go, I know that you have a very distinguished panel today who really will flesh out these ideals, and I thank you for the leadership you have provided and also my senior Senator, Paul Sarbanes.

Representative SCHEUER. Your senior senator has been an extraordinarily effective leader of this committee, as he is in the Senate and the Congress, in general, and we are grateful to him for that continuing outstanding leadership and very grateful to him for that continuing outstanding leadership and very grateful to you for your pungent, significant, insightful remarks this morning. We expected no less, and you delivered, Senator.

Senator MIKULSKI. I wish the so-called "budget summiters" were getting along as well as you and I.

Have a good day.

Representative SCHEUER. Thank you very much. [Applause.] When I get a titter of applause like that, I think maybe I should quit while I am ahead.

[The prepared statement of Senator Mikulski follows:]

PREPARED STATEMENT OF HON. BARBARA MIKULSKI

THANK YOU MR. CHAIRMAN. THESE HEARINGS ARE FOCUSING MUCH NEEDED ATTENTION ON THE ISSUES THAT ARE ABSOLUTELY CENTRAL TO OUR COUNTRY'S FUTURE, AND TO THE QUALITY OF LIFE THAT AMERICANS WILL ENJOY IN THE YEARS TO COME.

WE ARE HERE BOTH TO UNDERSTAND THE PROBLEMS WE FACE TO HAVE A WORKFORCE READY FOR THE FUTURE, AND TO FIGURE OUT WHAT WE CAN DO ABOUT THOSE PROBLEMS. TO FIND THE SENSIBLE SOLUTIONS TO THE CONCRETE PROBLEMS FACING AMERICANS IN OUR DAY TO DAY LIVES.

I BELIEVE WE ARE AT A CRITICAL POINT IN OUR HISTORY. WE ARE 12 1/2 YEARS FROM THE YEAR 2000, THE START OF A NEW MILLENIUM. THE WORLD IS A VERY DIFFERENT PLACE FROM WHAT IT WAS WHEN MOST OF US WERE BORN. OUR SOCIETY HAS CHANGED DRAMATICALLY. AND THE WORKFORCE IS GOING THROUGH PERHAPS ITS MOST SIGNIFICANT CHANGES SINCE THE INDUSTRIAL REVOLUTION.

THE ACTIONS WE TAKE NOW WILL DETERMINE WHAT KIND OF COUNTRY WE WILL BE -- WHAT KIND OF WORLD OUR CHILDREN WILL LIVE IN. THERE ARE NO QUICK FIX SOLUTIONS, BUT THERE ARE ANSWERS.

I WOULD LIKE TO OFFER A FRAMEWORK WE CAN USE TO APPROACH THESE ISSUES. FIRST OF ALL, AS WE ASSESS THE LONG RANGE NEEDS OF OUR COUNTRY, WE MUST ALSO RESPOND TO PEOPLE'S DAY TO DAY NEEDS.

THE NEXT QUESTION IS, HOW ARE YOU GOING TO PAY FOR ALL OF THIS? I BELIEVE A BIG PART OF THE ANSWER IS THAT WE MUST HAVE AN INVESTMENT STRATEGY FOR THE FUTURE. THIS IS NOT A NEW IDEA. WE DON'T HAVE THE TIME OR MONEY TO SPEND ON "GIVE AWAY" PROGRAMS THAT ANSWER ONLY TODAY'S NEEDS. WE SHOULD BUY AMERICAN, BUILD AMERICAN, AND INVEST IN AMERICA.

WHETHER IT'S INVESTING IN RESEARCH AND DEVELOPMENT, IN HIGHWAYS AND MASS TRANSIT OR IN THE HEALTH AND EDUCATION OF OUR CHILDREN, WHAT WE SPEND NOW MUST RETURN DIVIDENDS IN THE FUTURE. WITH AN INVESTMENT STRATEGY TO GUIDE PUBLIC SPENDING, WE CAN ENSURE AMERICA A FUTURE OF WHICH WE CAN ALL BE PROUD. AND WE WILL BE ABLE TO

GARNER THE SUPPORT NOW FOR THE EXPENDITURES NECESSARY TO PROTECT THE FUTURE.

WE HAVE THE DEMOGRAPHIC POTENTIAL OF FULL EMPLOYMENT OF EVERY SINGLE AMERICAN: TO MOVE OVER THE NEXT 15 YEARS FROM A LABOR SUPPLY TO A LABOR SHORTAGE. WE CAN REACH THAT POTENTIAL ONLY IF WE USE THE TALENTS OF EVERY SINGLE AMERICAN. SO LET'S TALK ABOUT WHAT WE NEED TO DO TO GET JOBS READY FOR THE PEOPLE, AND TO GET THE PEOPLE READY FOR THE JOBS.

WE NEED TO BE PUTTING MORE RESOURCES INTO JOB TRAINING, MAKING INVESTMENTS IN OUR WORKFORCE. WE NEED TO BE PAYING MORE ATTENTION TO CHILD CARE AND EDUCATION FOR OUR CHILDREN, THE WORKFORCE OF THE FUTURE.

WE NEED TO DEVELOP A FRAMEWORK FOR SETTING OUR BUDGETARY PARAMETERS AND PRIORITIES, TO HELP US PROCEED ON ISSUES SUCH AS

WELFARE REFORM, AND DECIDE WHERE BEST TO PUT OUR RESOURCES. AND HOW BEST TO MAKE THE INVESTMENTS NECESSARY TO MAKE STATE AND LOCAL ACTION POSSIBLE.

AND FINALLY, WE NEED TO GET LEADERSHIP FROM OUR FEDERAL GOVERNMENT IN PULLING THE PRIVATE AND PUBLIC SECTORS TOGETHER TO WORK TOWARD THIS COMMON GOAL -- GETTING AMERICA READY FOR THE FUTURE.

THANK YOU MR. CHAIRMAN. I KNOW YOU HAVE A LONG AGENDA TODAY. I WOULD LIKE TO REQUEST THAT THE REMAINDER OF MY REMARKS BE INSERTED IN THE RECORD.

IN THE WORKFORCE OF THE FUTURE THERE WILL BE FEWER YOUNG PEOPLE AVAILABLE TO GO TO WORK. OLDER WORKERS WILL BE EXPECTED TO STAY LONGER, BUT THEY WILL NEED RETRAINING AND HELP TO COPE WITH AN EVER CHANGING JOB MARKET. WOMEN WORKERS, ALREADY AN IMPORTANT PART OF THE WORKFORCE, WILL CONTINUE TO PLAY AN INCREASINGLY ESSENTIAL ROLE.

THE FACT THAT WOMEN ARE WORKING OUTSIDE THE HOME DOES NOT COME AS ANY GREAT SURPRISE. AFTER ALL, WOMEN HAVE ALWAYS WORKED IN OUR COUNTRY: FROM THE NATIVE AMERICAN WOMEN WHO ACTUALLY PRODUCED THE FOOD AT THE FIRST THANKSGIVING, TO THE WOMEN OF COLOR WHO TOILED IN THE FIELDS, TO THE IMMIGRANT WOMEN OF THE 19TH CENTURY WHO WORKED IN THE CANNERIES AND GARMENT FACTORIES -- WOMEN HAVE ALWAYS WORKED. AND TODAY, WHETHER SHE'S THE TEACHER OR THE LAWYER, THE SOCIAL WORKER OR THE DOCTOR, THE WORD PROCESSOR OR THE FARMER, SHE WORKS ONE SHIFT IN THE OFFICE AND ANOTHER AT HOME. THE WORK OF WOMEN HELPED BUILD THIS SOCIETY, EVEN IF IT HAS ALWAYS BEEN UNRECOGNIZED, UNORGANIZED -- AND UNDERPAID.

WELL, AFTER TWO HUNDRED YEARS, WOMEN HAVE BECOME AN OVERNIGHT MEDIA SENSATION. AND TODAY, WOMEN ARE GETTING ORGANIZED, DEMANDING FAIR PAY FOR THE WORK THEY DO, AND STRIVING TO CREATE A WORKPLACE THAT PAYS MORE ATTENTION TO FAMILY NEEDS.

HOW CAN OUR SOCIETY RESPOND BETTER TO FAMILY NEEDS? WE NEED TO THINK OF THE WORKPLACE AS THE NEW COMMUNITY, THE NEW NEIGHBORHOOD. IT IS THE PLACE WHERE MEN AND WOMEN EXCHANGE INFORMATION ABOUT THEIR FAMILIES, WHAT'S HAPPENING IN THEIR WORLD, ABOUT THEIR DECISIONS AND THEIR CHOICES.

WORKERS HAVE FAMILIES EVERY DAY -- NOT JUST AT THE ANNUAL PICNIC. AND THAT MEANS FAMILY ISSUES -- LIKE CHILD CARE -- ARE BUSINESS ISSUES. EVERY WORKING PARENT KNOWS THAT SAFE AND RELIABLE DAY CARE IS TOO HARD TO FIND, AND VERY HARD TO PAY FOR. EVERY EMPLOYER WILL TELL YOU THAT AT 3 O'CLOCK EVERY DAY, PEOPLE WONDER WHERE THEIR KIDS ARE. AND THE WORKER WHO'S WORRIED ABOUT HIS OR HER

CHILD BEING SAFE AND WELL CARED FOR IS A WORKER WHO CAN'T POSSIBLY WORK AT FULL POTENTIAL. AND THAT MAKES CHILD CARE A PRODUCTIVITY ISSUE.

NO COMMERCIAL FACILITY IS BUILT WITHOUT ALLOWING ROOM FOR ITS EMPLOYEES CARS. I THINK ITS TIME WE HAD AT LEAST AS MANY DAY CARE SLOTS FOR OUR KIDS AS WE HAVE PARKING SPACES FOR OUR CARS. WE MUST LOOK AT THE ISSUES OF AFFORDABILITY, ACCESSIBILITY AND SAFETY. WE MUST BRING THE SAME ENERGY AND INGENUITY TO SOLVING THIS PROBLEM THAT WE BRING TO SOLVING OTHER PROBLEMS. THERE IS NO SINGLE ANSWER.

IN 1984 I SPONSORED LEGISLATION TO CREATE CHILD CARE INFORMATION AND REFERRAL SERVICES. WE'RE STILL FIGHTING FOR THE MONEY TO MAKE THESE PROGRAMS WORK. I'VE WORKED ON LEGISLATION TO HELP DEAL WITH THE PROBLEM OF LATCHKEY CHILDREN, AND WILL CONTINUE THAT FIGHT AS WELL. AND NOW, WITH MY COLLEAGUES ON THE CONGRESSIONAL CAUCUS FOR WOMEN'S ISSUES, WE ARE LOOKING AT ON-SITE DAY CARE.

SPOTLIGHTING THOSE GOOD GUY EMPLOYERS -- LIKE FRANCIS SCOTT KEY MEDICAL CENTER IN BALTIMORE -- WHO ARE MEETING THEIR RESPONSIBILITIES. WE DON'T HAVE ENOUGH FRANCIS SCOTT KEY CENTERS, OR INFORMATION AND REFERRAL SERVICES, OR LATCHKEY PROGRAMS. BUT IF WE THINK AS A COMMUNITY, AND WORK IN PARTNERSHIP, WE CAN MEET THESE NEEDS.

AS YOU ALL KNOW, THE WORKFORCE ISN'T THE ONLY THING THAT'S CHANGING. THE WORKPLACE -- THE JOB OF THE FUTURE -- IS CHANGING AS WELL. AS OUR ECONOMY CONTINUES TO GROW, 9 OUT OF 10 OF THESE JOBS WILL BE IN THE SERVICE SECTOR. THESE JOBS WILL USE TECHNOLOGY THAT HAS NOT EVEN BEEN INVENTED YET. BY 1990, TWO OUT OF EVERY THREE JOBS WILL REQUIRE EDUCATION OR TECHNICAL TRAINING BEYOND HIGH SCHOOL.

AND YET RIGHT NOW, WE DON'T HAVE THE EXTENDED TRAINING -- WE DON'T EVEN KNOW HOW TO KEEP CHILDREN IN SCHOOL. HALF A MILLION

STUDENTS DROP OUT OF HIGH SCHOOL EVERY YEAR. HUNDREDS OF THOUSANDS GET HIGH SCHOOL DIPLOMAS, BUT THEY CAN'T READ WELL ENOUGH TO KNOW WHAT THOSE DIPLOMAS SAY. HOW WILL THEY GET A JOB -- OR KEEP ONE?

I AM WORKING RIGHT NOW WITH MY COLLEAGUES ON THE LABOR AND EDUCATION COMMITTEE ON THE REAUTHORIZATION OF THE MAJOR FEDERAL EDUCATION PROGRAMS. WHERE THERE ARE PROGRAMS THAT HAVE WORKED -- LIKE THE MAGNET SCHOOLS PROGRAM -- WE WANT TO SEE THEM CONTINUED AND IMPROVED. WE ARE LOOKING AT NEW WAYS TO RECREATE THE PARTNERSHIP THAT USED TO EXIST BETWEEN PARENTS AND SCHOOLS -- WORKING TOGETHER FOR THE FUTURE OF THE CHILDREN.

WHAT WE ARE, OR CAN DO, AT THE FEDERAL LEVEL ON ISSUES LIKE DAY CARE AND EDUCATION RAISES THE QUESTIONS OF WHAT THE FEDERAL ROLE SHOULD BE, AND WHAT HAS TO HAPPEN AT THE STATE AND LOCAL LEVELS. REMEMBER, TIP O'NEILL TOLD US, ALL POLITICS IS LOCAL. AND THOSE OF US WHO COME FROM LOCAL POLITICS KNOW THAT MEANS THERE'S A WHOLE LOT

OF POWER THERE AS WELL. WE KNOW THAT WE CAN MAKE A DIFFERENCE AT THE LOCAL LEVEL BY ORGANIZING: WORKSITE BY WORKSITE FOR CHILD CARE AND FLEX-TIME; COMMUNITY BY COMMUNITY FOR EFFECTIVE SCHOOLS; AND SO ON.

THE ROLE OF THE FEDERAL GOVERNMENT IN THIS SCHEME IS CLEAR:

LEADERSHIP -- PULLING THE PRIVATE AND PUBLIC SECTORS TOGETHER TO WORK TOWARD THE COMMON GOAL.

FRAMEWORK -- DEFINING THE PARAMETERS AND SETTING THE PRIORITIES, MAKING SURE NO ONE GETS LEFT OUT OR LEFT BEHIND.

RESOURCES -- MAKING THE INVESTMENTS NECESSARY TO MAKE STATE AND LOCAL ACTION POSSIBLE.

THAT'S WHAT I THINK THOSE OF US IN CONGRESS SHOULD BE FOCUSING ON.

THE ISSUES OF WORK AND THE FAMILY AFFECT ALMOST EVERY AMERICAN. THEY DETERMINE THE REALITY OF OUR EVERY DAY LIVES -- AND THE FUTURE OF OURSELVES AND OUR FAMILIES. NOW SPEAKING AS AN OLD COMMUNITY ORGANIZER -- THOSE ARE ISSUES AROUND WHICH WE CAN ORGANIZE.

WE CAN GET PEOPLE'S ATTENTION ON QUESTIONS THAT CONCERN THEM DIRECTLY. WE CAN SPEAK TO CONCRETE NEEDS -- AND SPECIFIC, COMMON SENSE SOLUTIONS. WE CAN SET GOALS THAT WE CAN ACHIEVE: GOALS LIKE SAFE, AFFORDABLE CHILD CARE AVAILABLE TO FAMILIES AT HOME OR AT WORK. WE CAN ASK OUR COMMUNITIES TO WORK WITH EMPLOYERS TO DEVELOP ON-SITE OR CLUSTERED-SITE CHILD CARE.

AND IN REACHING THOSE GOALS YOU CAN DO SO MUCH MORE. THE WOMEN AND MEN WHO WORK ON THESE ISSUES SHOULD BE MAKING POLICY ON SCHOOL

BOARDS AND LIBRARY BOARDS AND ZONING COMMISSIONS. THEY SHOULD BE APPOINTED TO LOCAL GOVERNMENTS AND RUNNING IN LOCAL AND STATE ELECTIONS. THE WOMEN AND MEN WHO WORK TOGETHER ON THE ISSUES OF WORK AND FAMILY SHOULD BE MAKING DECISIONS FOR OUR COMMUNITIES.

I AM AN AMERICAN IN SPIRIT, A SENATOR BY OCCUPATION, A DEMOCRAT BY CHOICE -- AND AN OPTIMIST BY NATURE. WHEN I LISTEN TO THE DEBATES ON THE SENATE FLOOR, SOMETIMES I GET REALLY CONCERNED ABOUT WHETHER THIS NATION UNDERSTANDS THE NEEDS OF THE FUTURE.

BUT WHEN I TALK TO MY CONSTITUENTS IN MARYLAND ABOUT WHAT THEY'RE DOING TO MAKE OUR SCHOOLS BETTER, TO MAKE CHILD CARE AVAILABLE, TO MAKE OUR LOCAL ECONOMY HUM -- I FEEL A LOT BETTER.

WHEN I HEAR FROM PEOPLE ALL OVER THE COUNTRY ABOUT ALL THAT

THEY ARE DOING, IN CHILD CARE AND HEALTH CARE AND POLITICAL ORGANIZING, AND WHEN I TALK TO THE PEOPLE WHO ARE OUT THERE WORKING IN THE FIELD -- THEN I KNOW WE CAN MAKE IT.

WE WILL MAKE THE RIGHT DECISIONS, SET THE RIGHT COURSE, CHOOSE THE RIGHT FUTURE. WE CAN ADOPT AN INVESTMENT POLICY -- INVESTING IN PEOPLE AS WELL AS FACTORIES. WE CAN ADJUST OUR NATIONAL PRIORITIES TO FOCUS ON INVESTING IN OUR OWN COUNTRY: IN THE *PHYSICAL* INFRASTRUCTURE THAT KEEPS OUR COMMUNITIES STRONG; IN THE *FISCAL* INFRASTRUCTURE THAT KEEPS OUR ECONOMY STRONG; AND, MOST IMPORTANT OF ALL, IN THE *HUMAN* INFRASTRUCTURE THAT KEEPS OUR NATION STRONG.

WE WILL INSIST ON LEADERSHIP TO TAKE US INTO THE YEAR 2000. AND WE WILL BUILD THE PARTNERSHIPS THAT WILL TAKE US THERE; PARTNERSHIPS BETWEEN THE PRIVATE AND THE PUBLIC SECTORS; BETWEEN BUSINESS AND COMMUNITY AND LABOR; BETWEEN CORPORATIONS AND SCHOOLS; BETWEEN WOMEN AND MEN.

WE WILL WORK TOGETHER AS PARTNERS, AND WE WILL MAKE IT WORK. IN THE WORKPLACE AND IN THE CONFERENCE ROOM, IN THE COMMUNITY BUILDING AND AT THE COFFEE BREAK -- AMERICANS KNOW HOW TO PUT IT TOGETHER.

WHEN I RAN FOR THE UNITED STATES SENATE LAST YEAR, I TALKED WITH MY CONSTITUENTS ABOUT MY CONCERNS FOR THE FUTURE. I TOLD THEM MY IDEAS. I ASKED FOR THEIR SUPPORT -- AND I GOT IT.

A NEW CENTURY IS COMING. A NEW ECONOMY IS BEING BORN. TOGETHER, WE CAN MEET THE CHALLENGE. AND I WANT TO HELP LEAD THE WAY.

THANK YOU VERY MUCH.

Representative SCHEUER. I have my apologies to make to the first panel, in fact, to all of you. We have a little brouhaha brewing up on the floor of the House sometime between the opening prayer and the time we go into the 5-minute rule, and I have to be there to object to a unanimous consent request for the Energy and Commerce Committee to consider a piece of legislation to which I, many consumer groups and labor groups are strongly opposed. So I am going to have to leave here at about 7 or 8 minutes to 10. I should be back around 10:15 or 10:20. And I apologize. We tried to get another member of the committee, Democrat, Republican, from the House or Senate, but in the waning days of the Congress, we are all pulled and virtually drawn and quartered from a thousand directions, and we couldn't get any member.

I was even willing to let a Republican chair this hearing. So you can imagine the state of panic that we were in, if we were willing to do that!

I have to leave in about 3 minutes, so I'll tell you what I will do. I will introduce the first panel. Don't even bother coming up, because we are going to recess, but at least I will tell the folks who we are going to hear from.

The panel includes four distinguished witnesses. In fact, we have superb witnesses in both panels.

Harold McGraw, chairman of McGraw Hill, is president of the Business Council for Effective Literacy, which he founded in 1983 for the primary purpose of getting the business community more aware of and involved in the problems of adult functional illiteracy in our country. He is also chairman of the Council for Aid to Education. He is vice chairman of the New York City Public Library, president of the Princeton University Press, and vice president of the International Center for the Disabled. A super witness.

Next is Stephen Trachtenberg, whom I have known for 20 years, first when he was a congressional aide to Congressman John Brademas, who is now president of New York University. I suppose a few years before Brademas went to NYU, Mr. Trachtenberg went to Connecticut to become president of the University of Connecticut. Is that the right university?

Mr. TRACHTENBERG. University of Hartford.

Representative SCHEUER. And before that, he was vice president of Boston University, where he served as dean and professor of Political Science. He was not only an assistant to John Brademas, but before that a Special Assistant to the U.S. Commissioner of Education, Harold Howe during the administration of Lyndon Johnson, when we had a President who knew the facts, who knew what was going on, who could grab you by the lapels and talk about the actual problems facing America. One becomes nostaligic for the days of Lyndon Johnson.

Third is Michael McMillan, who is executive director of the Human Resources Development Institute, HRDI, of the AFL-CIO. Under his direction, they have introduced remedial education to improve the prospects for dislocated workers and return to work services for disabled union members.

The last witness on the first panel is William Spring, currently vice president of the Federal Reserve Bank of Boston in the District Community Affairs Department. He is coauthor of the "Political Economy of Public Service Employment," and he has coauthored articles on employment policy in the New Republic, Washington Post, the Boston Globe and the New York Times Magazine section.

This is our panel, and since I have a couple of minutes left, I will introduce the second panel.

The second panel includes Joan Wills, director of the Center for Policy Research of the National Governors' Association. She has been involved in job training programs and education programs for many years. She worked closely with Marc Tucker in developing the framework for these hearings and in suggesting witnesses. And I want to publicly thank her and Marc Tucker of the Carnegie Forum—and Stephen Trachtenberg too, who was in at the inception—for their remarkable efforts in helping us put this together. If I say so myself, this is an outstandingly fine set of hearings. I don't take the credit at all. These were the thoughtful, insightful people—Joan Wills, Stephen Trachtenberg, Marc Tucker—who really helped conceptualize this set of hearings and not only conceptualized the structure but suggested the witnesses.

Our second witness in the second panel will be James Kadamus, assistant commissioner for Occupational and Continuing Education in the New York State Department of Education. He has jurisdiction over three quarters of a million students and 1,200 secondary and postsecondary schools in New York State. He has coauthored a book entitled "New Directions for Vocational Education in the United States." And he is going to tell us whether our Voc Ed system is still teaching kids how to make buggy whips and Stanley Steamers. And if they aren't, what are they training kids to do? And if they still are, how we can change all that.

He is not here now. He is going to be here at or before 11 o'clock.

Ms. Lori Strumpf, who is our third witness on the second panel, is presently the project director for the Center for Remedial Design, which is a joint project of the U.S. Conference of Mayors, National Association of Private Industry Councils, National Job Training Partnership, Alliance of Business, and the National Association of Counties. We are looking forward to hearing Ms. Strumpf, who works for this broad phalanx of groups that have great, special, enlightened interests in the question of worker training and national productivity.

Our fourth witness on the second panel is Judith Gueron, president of the Manpower Demonstration Research Corp., a nonprofit group that designs, manages, and studies demonstration projects for helping disadvantaged economic groups, including welfare recipients, school dropouts, and teenaged parents. These are the targets, really, of this hearing. And Ms. Gueron will be here by 10 o'clock, so I am told.

Is this Ms. Gueron coming in the door?

Ms. **Gueron**. Yes.

Representative **Scheuer**. I have just introduced you, Ms. Gueron. You will be on the second panel that will be called in about three-quarters of an hour, I suppose. I said you would be here at 10 o'clock, and you beat it by about 3 minutes.

And Dale Parnell, I will introduce when I get back, which should be in 15 or 20 minutes.

And I apologize, profoundly, for the interruption.

We will suspend for 15 minutes.

[A 15-minutes recess was taken at this point.]

Representative SCHEUER. I apologize profusely and painfully for this delay, but it was in a good cause and we accomplished something constructive. The strategy that we were working on worked, and the good guys won for a change.

We will now go to the first panel. So will Mr. McGraw, Mr. Trachtenberg, Mr. McMillan, and Mr. Spring please come to the witness table?

We are going to go on the 5-minute rule this morning, and as Mr. Trachtenberg knows very well, having drafted a lot of 5-minute statements, you can say a lot in 5 minutes.

Since that is the discipline we have to operate under, and since at least one of the witnesses functioned under that rule in the past, perhaps I feel more awkward than I should. I apologize again to this panel, and I apologize to the second panel for this delay. It was unavoidable. It was the exigencies of this legislative process. I am just terribly sorry it happened to you.

All right, we will go through the four witnesses, and then we will have some questions. I may interrupt from time to time. Since there is only one of us up here, we can be a little less formal, but we will have questions after the four of you have spoken.

So let's start out with Mr. McGraw. We are delighted and honored to have you, Mr. McGraw. You are a very distinguished national leader in the business community, and you represent all of those qualities of business leadership that I learned about more than 40 years ago, at the Harvard Business School, when they talked about business responsibility and business integrity and business idealism, and you represent all of those. And we have seen too many business leaders who haven't.

It is very refreshing and encouraging to see one who does.

So it is a great pleasure to welcome you here.

Mr. McGRAW. Thank you very much. I am glad to give up some of my 5 minutes to those nice comments.

Representative SCHEUER. You don't have to.

Mr. McGRAW. In line with your request, I will cut through a lot of deathless prose and try to make a few points.

Representative SCHEUER. And the testimony of all four of you and the second panel, will be printed in full in the record.

STATEMENT OF HAROLD W. McGRAW, JR., CHAIRMAN OF THE BOARD, McGRAW-HILL, INC.

Mr. McGRAW. Mr. Chairman, we all know that we have a severe basic skills problem in the work force when you have one out of every five U.S. workers reading at no more than eighth grade level and one out of eight reading at roughly fourth grade or below and most of the jobs in this work force have considerably higher requirements than that.

We also know that constant advances in technology are a major factor altering the work environment, and many of the jobs that could once be done with low levels of literacy are being eliminated, and this is not just a cyclical or general unemployment situation. It is a permanent process of restructuring.

We have a serious mismatch between what many jobs require in terms of tasks and responsibilities and the skills and abilities of the persons to perform them. A large percentage of our unemployed now are displaced workers, and people are being laid off at about 2 million a year.

In addition, we have not only that basic problem, but we have it as a growing problem in terms of the demographics of the entry level work force, which is changing both in numbers and decreasing, and also in terms of the composition, and we will be having many more refugee and immigrant groups and indigenous minority youth.

Adult illiteracy is already costing business billions today in workplace accidents, product quality, et cetera, but these costs are going to increase as businesses now face basic skills upgrading programs for their employees, the retraining needs of displaced workers, and the basic training needs of those available for new hire.

Well, we all share—all of the aspects of government and private sector share a responsibility to work to pull this together and something about it. There is no substitute for the strong leadership that has to come from the Federal Government.

I would like to say that I hope we will attack this literacy problem on two fronts, continuing to do so both for prevention and correction. The schools may be doing a better job today, but there are still far too many dropouts, and these are woefully unprepared to cope, and there are large numbers who finish high school with barely marginal literacy skills.

We need to improve the teaching of basic skills. We need to bring parents and children together in literacy and Head Start Programs, since most of the literacy problems, as we know, have their roots in the home. But we still have upwards of 70 million adults out of school but with barely minimal basic skills and many of whom are in our work force today, and we must do something more—in these next years to correct that situation.

We need major Federal increases for the support of adult basic skills programs, and whether those programs are funded by the Federal Government or the State, they need to be more flexible in their eligibility criteria, to include the basic skills programs, and to include some of these volunteer organizations.

And we also need Federal help in getting overall leadership and coordination in each of the States. We need more done to focus on research and demonstration projects at all levels, both at the adult level in the workplace and also in the schools, and then we need a Federal Government that can spotlight these for others to follow when they say this is a good program and it is working.

Our business council of course is encouraging the larger companies who hire over 500 workers to develop their own inhouse training facilities for basic skills, but there are several million smaller companies not in a position to provide their own training facilities.

We are encouraging and working with those smaller businesses to turn to the educational facilities in their own localities. The major problem we are having there is as they start to do that the majority of such educational experts to which business needs to turn are not sufficiently experienced in developing job-related programs and have not been adequately exposed to workplace realities.

The Federal Government could help here with the State and local to see that more of these local educational people get training in the workplace and the job-related approach that is going to be increasingly needed. The demographics are going to push business more and more into asking for and needing that help, and we must have it ready.

I see a red light, Mr. Chairman. I will stop at that point.

Thank you.

Representative SCHEUER. Thank you very much, Mr. McGraw.

[The prepared statement of Mr. McGraw follows:]

PREPARED STATEMENT OF HAROLD W. McGRAW, JR.

Mr. Chairman:

I am chairman of the board of McGraw-Hill, Inc., but appear before your committee today as president and founder of the Business Council for Effective Literacy.

BCEL is a national organization of business and educational leaders concerned with achieving effective adult literacy in the United States. One of our goals is to create awareness, especially in the business community, of the problems this country and millions of its citizens individually face as a result of functional illiteracy. Another is to encourage businesses to help with community literacy programs--by giving funding, in-kind assistance, and planning help--and to give them guidance on how to do so. Another is to help American companies recognize the need for and then establish training programs to increase the basic literacy skills of their employees. We try to achieve our goals through a varied publications program--newsletters, leaflets, monographs, and topical how-to guides--and technical assistance provided in many other forms directly by our staff to the business and literacy communities.

We also feel a responsibility to concern ourselves with the analysis and development of public policy with respect to illiteracy, and it is in that respect, particularly as that public policy focuses on the business community, that I welcome the opportunity to appear before you today.

Illiteracy in the workplace is a major aspect of the overall adult illiteracy problem in the U.S. We know, for example, that poor basic skills are a fact of life among large numbers of currently-employed persons, most of whom will be in the workforce for the next one or two decades or more. Research by Larry Mikulecky of Indiana University suggests that one out of every five present U.S. workers reads at no more than 8th-grade level, and one out of eight reads at roughly 4th-grade or below. Estimates of illiteracy among the unemployed range from 36 percent (David Harman, Columbia University) to 50-75 percent (Department of Labor). Yet a major 1980 study of occupations in the U.S. found that 70 percent of the reading material in a cross section of jobs today is between 9th and 12th-grade difficulty, and 15 percent is even higher.

Just why so many adult Americans can't read or write to an adequate level of functioning has no simple answer. The causes are complex and interrelated--the effects of discrimination and poverty, inadequately trained teachers or poor schooling, intergenerational transfer of illiteracy from parents to children, the large and continuing influx of new refugee and immigrant groups (many of whom were illiterate in their home countries), and dramatic changes in the workplace and in the social requirements for literacy.

Constant advances in technology are, of course, a major factor altering the work environment. What is happening is that the basic production model in use for most of this century is being permanently restructured and eliminating many of the jobs that could once be done with low levels of literacy. According to most analysts, the crisis facing American business is a massive one that will require a substantial response on a long-term basis. We aren't in the midst of a cyclical or general unemployment problem but involved in the permanent process of restructuring.

This very profound restructuring of the workplace has already created a very serious mismatch between what particular jobs require in terms of tasks and responsibilities that must be carried out and the skills and abilities of persons to perform those jobs. One result is that a growing percentage of those among the currently-unemployed are displaced workers, whose ranks continue to increase at an alarming rate. The Office of Technology Assessment of the Congress has indicated that 11.5 million Americans lost their jobs between 1979 and 1984, and the Bureau of Labor Statistics reports that two million more continue to be laid off each year. Moreover, the U.S. General Accounting Office reported recently that in plants with over 100 employees, one-third of laid-off employees are given only two weeks of advance notice or less and another third are given none at all.

This complicated and urgent situation is made even more so when the changing demographics of the entry-level labor pool are taken into account. The Department of Labor, the National Alliance of Business, the Center for Remediation Design, the National Assessment of Educational Progress, and others have made it quite clear that the largest group of new workers over the next decade or two will be refugee and immigrant groups and indigenous minority youth. Yet NAEP's 1986 study of the basic skills levels of young adults aged 21-25 produced some alarming statistics. For example, some 30 percent of young black adults today are able to read only between 4th-grade and 8th-grade level, and another 20 percent read to about 4th-grade.

The problem of adult illiteracy is already costing business billions of dollars each year--in terms of lowered worker productivity, workplace accidents, poor product quality, and lost management and supervisory time. The cost is certain to increase as businesses struggle to provide compensatory basic skills upgrading programs for their employees and as they are forced to address the retraining needs of displaced workers and the basic training needs of persons available for new hire. But businesses are also losing in another way. Illiterate persons in the general population, whether or not they are being prepared for work, represent a major loss of potential customers for products and services.

In short, adult illiteracy, in the workplace and outside in the larger general community, is a pervasive problem of human resource development that affects every social, political, and economic institution in the country. It blocks millions of individuals from effectively participating in American society as citizens and as workers. Our nation simply cannot accept such a situation for long and expect to remain healthy, economically competitive, and vital as a world leader and a model of democracy and opportunity.

My colleagues and I at BCEL are convinced that the national effort to solve or drastically reduce the problem of functional illiteracy must unite many segments of our society: state and local governments, the business community, labor unions (which are already at the forefront of service provision), provider groups of all kinds, and many others. But there is no substitute for strong leadership and funding from the federal government, for only at this level can all the forces be brought together in the long-term effort that will be needed to effectively turn the problem around.

In August I had the opportunity to testify before several members of the Senate Education Committee. I urged that we tackle the overall adult illiteracy problem on two levels: prevention and correction. I said that contrary to many impressions, I feel our schools are doing a better job than in the past in providing more of our students with good basic skills. But I also noted that there are still far too many dropouts who leave school woefully unprepared to cope, and there are large numbers who finish high school with barely marginal literacy skills. We certainly need to improve the teaching of basic skills in the schools and in particular to reach at an earlier age those children who are at risk for dropping out. And we need to bring parents and children together in literacy and Head Start programs, for most literacy problems have their roots in the home.

I also testified that even great improvement in the schools starting right now cannot help with the millions of adults already in the labor market who lack sufficient skills to function at any but the lowest levels. To address these needs, action seems to me to be needed in several areas:

First, major federal increases are needed for the support of adult basic skills programs throughout the country--in the federal Adult Basic Education Program, the Job Training Partnership Act, and other federally-operated programs. I am greatly encouraged that the House of Representatives has recently voted an increase in funding for ABE to $200 million per year.

Second, publicly-funded programs, whether the source of funding is the federal government or the states, need to be made more flexible in their eligibility criteria. Basic skills programs operated by businesses and/or unions should be among the eligible groups, as should community-based organizations of all kinds.

Third, overall leadership and coordination in each state needs to be developed even further than it has been. The federal government should have a role in encouraging and supporting this essential activity and in doing what it can appropriately do to foster the greater involvement of business in planning and development of resources at the state and local level.

Fourth, funding is needed for research and demonstration projects to help develop and disseminate new methods of literacy instruction, both for the benefit of the general literacy community and the business community, including the use of technology to extend outreach and achieve economies of scale.

Fifth, coordination between adult education, the education system generally, social service agencies, and the job training system needs to be improved. The best single approach, I feel, is to foster the involvement of job training groups along with others in the work and membership of state and national literacy planning groups. Thus, I urge that legislation and funding for literacy programs in general take into account this need for linkage and coordination.

Sixth, the Metzenbaum-Kennedy provisions included in the currently-pending Omnibus Trade Bill call for two months of advance notice to employees facing lay-off. While advance notice is highly desirable, it may not always be practical, and what are more needed are severance pay, assistance in locating other jobs, and especially opportunity for realistic retraining. Insofar as possible retraining should take place prior to layoffs as, to quote the October 1987 BCEL Newsletter, "the psychological and financial stress of joblessness are poor conditions for effective learning, and the lack of a workplace robs the instruction of a meaningful context."

Seventh, the General Accounting Office reports that no more than 5-7 percent of eligible displaced workers are being served by Job Training Partnership programs, and that even then only an average of two weeks of remedial instruction is provided. I support current efforts to revise and strengthen the JTPA program to make basic skills provision a larger focus of attention, and to adjust the job-placement requirements that tend to screen out persons with the greatest skills need. I hope that Congress will give major attention to this matter. [In so doing I want to recognize the outstanding leadership that has been provided by Secretary of Labor Brock in support of general adult literacy as well as workplace literacy. For example, through the Department's Office of Strategic Planning and Policy Development, more than $4 million was granted in July for 14 projects to improve literacy skills among youth and adult workers throughout the country.]

Eighth, at BCEL we hear regularly from businesses that have come to recognize and wish to address basic skills deficiencies among their employees. In June we put out a detailed how-to guide for planners of employee job-related basic skills programs. Most businesses aren't large enough to have the resources to develop and run their own programs, so we have advised them to contract with outside educational experts in their communities for help with job task analysis, curriculum development, teaching and program operation, and skills assessment and testing. I am speaking of community colleges and four-year colleges and universities, voluntary literacy organizations, adult basic skills programs run by school districts, community-based organizations, and other provider and planning groups. But there is a chicken-and-egg problem here. The majority of educational experts to which business must turn are not sufficiently experienced in developing job-related programs and have not been adequately exposed to workplace realities. Even as these groups struggle to develop their capacity for instruction and technical assistance for the general population, they need to develop the capacity to provide technical assistance help to the business community and to be given the financial resources to do that. Without this added capacity, the efforts of business to attend to their own workforce needs will be hampered.

There is considerable emphasis being placed in the area of workplace literacy both through the efforts of Congress to develop national legislation and funding to help strengthen this aspect and on the part of the business community as they recognize the growing dimensions of this need. As vitally important as that area is, however, I hope we will also keep very much in mind the needs for general literacy programs and activities in the states and communities throughout the country. Here too we must look to federal leadership from the Congress and for continuing and growing support from business through their grants and in-kind help.

I appreciate the opportunity to be heard in this important forum and am greatly encouraged by the growing interest throughout Congress in taking action to further workplace literacy and adult literacy in general.

Representative SCHEUER. Mr. Trachtenberg, welcome back to Capitol Hill and welcome in your role of assisting us and teaching us.

STATEMENT OF STEPHEN JOEL TRACHTENBERG, PRESIDENT, UNIVERSITY OF HARTFORD, WEST HARTFORD, CT

Mr. TRACHTENBERG. Thank you very much, Mr. Chairman.

The question that came to me in the letter I received from the committee asked whether or not America's colleges and universities need to be involved in addressing the kinds of issues that you are deliberating.

From my point of view, the issue is not whether they should be. Indeed, I think they are, and from my point of view, the issue is, are they doing as good a job as they possibly can?

One aspect of your inquiry asked about the role of our business schools in assisting people to actually go out and obtain jobs in the work world after they graduate, and an issue that I am concerned about and that I address at some length in my prepared statement has to do with the accreditation of colleges of business through the AACSB, a discipline accreditation agency, which I think in some ways frustrates the interest of many American colleges and universities in the education of young people who want to go on to business careers.

Essentially, AACSB has a set of standards that they apply more or less uniformly to every business school in the United States which seeks their imprimatur. The fact of the matter is that they are trying to squeeze all of America's colleges and universities into a size 42 regular suit. As you can see, some of us need a 46, and others can undoubtedly make do with a 36.

And, moreover, they have taken the position that professional courses taken at the junior and community college level are not going to be recognized by schools that seek their accreditation, and they have asked that the number of clinical faculty be driven out so that, for example, to cite only one problem, they have required that professors of accounting have Ph.D.'s in accounting.

My own judgment is that some of the best faculty of accounting in this country are people who are themselves partners in accounting firms, have CPA's but have not gone on to do great theoretical work perhaps in accounting.

Representative SCHEUER. They are practitioners?

Mr. TRACHTENBERG. Yes, and who are willing and able to teach at the community college level or the business faculty level.

I have in fact talked to people from the organization and suggested that there is some wisdom to be had by looking at the World Boxing Association, which has figured out that there are heavyweights and middleweights and it is possible to be a champion even if you are not all of the same size and all of the same weight, and it ought to be possible for business schools to be accredited with different missions and to have full recognition in the arena of business schools.

I think the current system prevents business faculty who want to be involved with the community, who want to be involved with the corporate world in significant measure, from doing so because they are driven toward more narrowly academic, more narrowly theoretical pursuits and rewards.

My judgment is that every business school does not have to be Stanford and every business school does not have to be Harvard, and indeed there are different models and different missions and that America would be best served by having pluralistic standards for business school accreditation.

Let me take another issue on. I believe that America's colleges and universities have been altogether too negligent in dealing with current workers, which is not to say that we don't have many people coming to take night courses and continuing education. But I think the questions of literacy, the questions of remedial education, have been those that the universities have stayed away from because they are seen as having less prestige; they are less elegant.

The opportunity for universities to work with the corporate community in dealing with these kinds of things has never been stimulated as much as it could be.

I see a tremendously pressing issue in Hartford, CT, where the insurance companies, which tend to have a predominant influence in the economy of the community, are desperately, desperately seeking workers who have a capacity with words and with numbers that will allow them to do the clerical jobs that running insurance companies require.

And what is happening is that these people are being driven—the companies are being driven—to try to become more hardware oriented rather than more human-oriented, looking for computers and machines to solve their problems rather than for people.

I think unless we can find some way to get the people not to do the jobs, we are going to discover we have more and more unemployment as capital intensity goes up and people put their money into technological solutions rather than human solutions.

Representative SCHEUER. Isn't it true that you need people not to do the job but to man the machines?

Mr. TRACHTENBERG. And repair the machines as well. There are new jobs that come out of the technology, but they tend to be fewer in number.

Representative SCHEUER. And demanding much higher skills?

Mr. TRACHTENBERG. Much higher skills, much higher pay.

Representative SCHEUER. Three-quarters of the new jobs being created between now and the end of this century will require not only a high school degree but some postsecondary education?

Mr. TRACHTENBERG. The red light inhibits me from going on. I do want to state one sentence.

American college and university campuses during the summer are among the most neglected resources of this country. We have gigantic plants. They cost a fortune to build. They cost a fortune to maintain, and in large measure they are wasted in June, July, and August. That resource needs to be focused, trying to solve some of the kinds of issues that Mr. McGraw has made reference to and harnessed through the——

Representative SCHEUER. How about the elementary and secondary school plants as well?

Mr. TRACHTENBERG. Yes.

Representative **Scheuer**. We have had extended discussion about the possibility of having the schools open all year, including evenings, weekends, and holidays. This would be partially for recreation and entertainment that would involve some learning, partially for remedial education, partially for all kinds of programs for the IGC's, the intellectually gifted children, and it looks like an idea whose time has come.

But there are important institutions who oppose this. First, the teachers don't like it at all, and they feel very threatened by it, and, second, the parents don't like it, especially middle-class parents who want to go away with their kids for the summer or want to go away themselves, and, third, the kids don't like it because they want to make some pin money over the summer and they figure that is the time to pick up $1,000 or $1,500 to buy that VCR or the stereo, and, fourth, there is a very powerful lobby called the travel and recreation industry. They don't want it either.

And you get down to who wants it, and there are a lot of desperate voices out there, people like all of you, I suppose, who want to improve the quality of education. But we are not organized as well as we should be, and between the kids and the teachers and the parents and the recreation and travel industry it has been very difficult making any progress.

Mr. **Trachtenberg**. You may have to rifle in on it rather than shotgun in on it. We do so with help from the Aetna Life Insurance Co. of a financial sort. We have been running programs in the summer at the University of Hartford for youngsters from inner city Hartford, training them in math and language skills, with the hope that we can bring them up to a grade that will permit us to admit them to the university after they graduate.

We have been doing some really good work, not only getting some of the students to come to us but, unhappily, losing some to other universities around the country because the SAT scores and the academic confidence of these youngsters is getting to be so good that they are interesting to colleges from coast-to-coast.

Thank you, Mr. Chairman.

Representative **Scheuer**. We can take great pride in that, and we can talk about how we can craft such a program with a high-power rifle rather than a shotgun.

[The prepared statement of Mr. Trachtenberg follows:]

PREPARED STATEMENT OF STEPHEN JOEL TRACHTENBERG

THE OCTOBER 7, 1987 LETTER INVITING ME TO MEET WITH THIS COMMITTEE TODAY PRESENTED THE FOLLOWING ASSIGNMENT:

"WE WOULD APPRECIATE YOUR DISCUSSING WHETHER UNIVERSITIES ARE ADEQUATELY PREPARING STUDENTS TO FILL THE NEEDS OF MODERN INDUSTRY (PARTICULARLY BY TEACHING MODERN MANAGEMENT TECHNIQUES), THE EXTENT TO WHICH UNIVERSITIES WORK WITH INDUSTRY TO DETERMINE WHAT OUGHT TO BE TAUGHT, AND WHAT YOU CONSIDER TO BE THE APPROPRIATE ROLE OF INSTITUTIONS OF HIGHER EDUCATION IN RESHAPING THE WORK FORCE. FURTHER, PLEASE DISCUSS THE EXTENT TO WHICH UNIVERSITIES MIGHT BE USED TO PROVIDE REMEDIAL EDUCATION AND TRAINING TO CURRENT WORKERS, AND WHETHER COLLEGE STUDENTS CAN BE USED EFFECTIVELY IN THIS CAPACITY."

CONGRESSMAN SCHEUER, DISTINGUISHED MEMBERS OF THE SUBCOMMITTEE ON EDUCATION AND HEALTH, IT IS AN HONOR FOR ME TO BE HERE TODAY IN ORDER TO DISCUSS THE ROLE THAT UNIVERSITIES ARE PLAYING, CAN PLAY, AND NEED TO PLAY IN RELATION TO THE COMPETITIVENESS AND QUALITY OF THE AMERICAN WORK FORCE.

TESTIMONY BEFORE THE SUBCOMMITTEE ON EDUCATION AND HEALTH OF THE JOINT ECONOMIC COMMITTEE RE: "COMPETITIVENESS AND THE QUALITY OF THE AMERICAN WORKFORCE" ON THURSDAY, NOVEMBER 19, 1987, IN WASHINGTON, D.C. MR. TRACHTENBERG HAS BEEN PRESIDENT OF THE UNIVERSITY OF HARTFORD SINCE 1977.

THE SUBJECT IS A CHALLENGING ONE BECAUSE OF THE UNIQUE HISTORY AND FUNCTIONING OF THE AMERICAN HIGHER EDUCATION SYSTEM COMPARED TO THOSE IN OTHER INDUSTRIALIZED NATIONS. OUR SYSTEM IS MUCH LARGER THAN THOSE OF THE COUNTRIES WITH WHICH WE COMPETE. IT ENROLLS A MUCH MORE SIZEABLE PERCENTAGE OF THE ENTIRE POPULATION. IT HAS ALSO BEEN ASSIGNED A MUCH BROADER SERIES OF TASKS -- SOME OF THEM CLEARLY DEFINED, OTHERS IMPLICIT.

LET ME BEGIN WITH A VERY SPECIFIC EXAMPLE. IN JAPAN, A NATION WHOSE INDUSTRIAL FUNCTIONING WE HAVE ALL LEARNED TO ADMIRE, THE UNIVERSITY EXPERIENCE IS A RELATIVELY PERIPHERAL ONE IN THE MOVEMENT FROM EARLY CHILDHOOD TO ADULT EMPLOYMENT. IT'S AT THE ELEMENTARY SCHOOL LEVEL, AND MOST OF ALL AT THE HIGH SCHOOL LEVEL, THAT YOUNG PEOPLE UNDERGO EXPERIENCES LIKE THE -- QUOTE -- "EXAMINATION HELL."

FOR CULTURAL REASONS, OUR NATION FUNCTIONS DIFFERENTLY. FIRST OF ALL, WE AREN'T ETHNICALLY AND LINGUISTICALLY HOMOGENEOUS. OUR ELEMENTARY AND HIGH SCHOOLS INCLUDE AMONG THEIR MANDATES THE NEED TO DEAL WITH YOUNG PEOPLE FROM EVERY IMAGINABLE BACKGROUND, ECONOMIC LEVEL, IMMIGRANT STATUS, AND LEVEL OF PREVIOUS EDUCATION. MOREOVER, AMERICAN MOTHERS -- WITH THE NOTABLE EXCEPTION OF THOSE IN FAMILIES THAT HAVE RECENTLY IMMIGRATED FROM THE FAR EAST -- AREN'T INCLINED TO SERVE AS ACADEMIC OVERSEERS AND COACHES WHO DEVOTE A VERY LARGE PART OF THEIR

ENERGIES TO THE TASK OF MAKING THEIR CHILDREN INTO PROFESSIONAL AND VOCATIONAL SUCCESSES.

WHAT THAT MEANS IS THAT A MUCH LARGER SHARE OF THE EDUCATION BURDEN FALLS, IN THIS COUNTRY, ON OUR UNIVERSITIES -- EVEN WHEN THE NATION WITH WHICH WE ARE COMPARING OURSELVES IS NOT JAPAN BUT WEST GERMANY, SWEDEN, FRANCE, OR THE UNITED KINGDOM. THERE IS A VERY GOOD REASON FOR THE FACT THAT NEARLY TWO-THIRDS OF OUR CITIZENS TAKE PART IN HIGHER EDUCATION. THEY NEED TO DO THAT IN ORDER TO BECOME TRULY, FULLY EMPLOYABLE.

THE QUESTION, THEREFORE, IS NOT WHETHER HIGHER EDUCATION NEEDS TO BE INVOLVED IN TRAINING THE AMERICAN WORK FORCE FOR COMPETITIVENESS AND QUALITY. IT IS ALREADY VERY DEEPLY INVOLVED. THE QUESTION IS WHETHER IT IS DOING, ON AVERAGE, AN ADEQUATE JOB, OR A GOOD JOB, OR AN APPROPRIATE JOB. THE QUESTION IS ALSO WHETHER THERE ARE SIGNIFICANT CONSTITUENCIES THAT ARE BEING MISSED BY OUR UNIVERSITIES BECAUSE THOSE CONSTITUENCIES HAVE BECOME IMPORTANT FOR OUR NATIONAL ECONOMY IN RECENT YEARS WHILE THE UNIVERSITIES ARE STILL ORIENTED TOWARD AN EARLIER STATE OF AFFAIRS.

LOOKING AT THOSE QUESTIONS FROM THE POINT OF VIEW OF A UNIVERSITY PRESIDENT -- THE PRESIDENT, MOREOVER, OF A PRIVATE UNIVERSITY THAT WORKS HARD TO BALANCE ITS BOOKS BECAUSE IT HAS A RELATIVELY

MODEST CAPITAL ENDOWMENT -- MY PERSONAL SENSE IS THAT HIGHER EDUCATION RELATES TO THE NATIONAL ECONOMY IN SURPRISINGLY OBLIQUE AND UNCERTAIN WAYS.

YES, WE HAVE SCHOOLS OF BUSINESS THAT TEACH MANAGEMENT, MARKETING, FINANCE, ACCOUNTING AND OTHER SUBJECTS. BUT THE WORLD OF BUSINESS EDUCATION IS CURRENTLY IN THE GRIPS OF A CONTROVERSY THAT WILL HAVE A SIGNIFICANT LONG-RANGE IMPACT ON THE AMERICAN ECONOMY. INCREASINGLY, AMERICAN BUSINESS SCHOOLS COMPETE FOR STUDENTS BY DECLARING -- IF THEY CAN DECLARE IT -- THAT THEY HAVE RECEIVED ACCREDITATION FROM THE AMERICAN ASSEMBLY OF COLLEGIATE SCHOOLS OF BUSINESS, MOST OFTEN REFERRED TO AS AACSB. MANY DO NOT BOTHER TO MENTION THAT ACCREDITATION OF THIS KIND IS SUPPLEMENTARY TO THAT RECEIVED FROM THE REGIONAL ACCREDITING BODIES THAT FUNCTION WELL BEYOND THE BUSINESS AREA AND ARE RESPONSIBLE FOR EVALUATING ALL ACADEMIC PROGRAMS.

TO OBTAIN AASCSB ACCREDITATION FOR THEIR BUSINESS SCHOOLS, UNIVERSITIES MUST MEET REQUIREMENTS THAT HAVE A STRONGLY ACADEMIC RATHER THAN PRACTICAL FLAVOR. THEY MUST HAVE A CERTAIN PERCENTAGE OF PH.D.S ON THE FACULTY. THOSE FACULTY MEMBERS MUST HAVE THEIR DOCTORATES IN THE FIELDS THAT THEY ACTUALLY TEACH, EVEN IF THE DOCTORATE WAS RECEIVED MANY YEARS EARLIER. FACULTY MEMBERS ARE EXPECTED TO EMPHASIZE RESEARCH AND PUBLICATION RATHER THAN TEACHING SKILLS OR CONTACTS WITH LOCAL AND REGIONAL

COMPANIES. TO OBTAIN AACSB ACCREDITATION FOR THEIR BUSINESS SCHOOLS, THE UNIVERSITIES MUST HAVE A CERTAIN NUMBER OF BUSINESS BOOKS IN THEIR LIBRARIES, DISTRIBUTED ACROSS CERTAIN SUBJECTS. AND SO ON AND SO ON.

A GROWING NUMBER OF ALL UNIVERSITY BUSINESS SCHOOLS HAVE NOW ACCEDED TO THESE AACSB REGULATIONS. OTHERS, LIKE THE BUSINESS SCHOOL OF MY OWN UNIVERSITY, ARE SERIOUSLY CONSIDERING THEM. THE FACT IS THAT IT IS VERY VERY HARD FOR A SCHOOL TO ATTRACT STUDENTS WHEN ITS COMPETITORS CAN BOAST OF HAVING RECEIVED AACSB ACCREDITATION BECAUSE THE SUGGESTION IS, HOWEVER WRONGLY, THAT THOSE ATTENDING A SCHOOL WITHOUT THAT PARTICULAR CREDENTIAL WON'T GET AN EQUALLY VALUABLE DEGREE AND WON'T BE ABLE TO GET AN EQUALLY GOOD JOB.

THE PROBLEM IS OBVIOUS. BACK IN THE 1970'S, DETROIT TOOK A LICKING FROM JAPAN BECAUSE JAPANESE EXECUTIVES HAD A BETTER FEEL THAN DETROIT EXECUTIVES FOR WHAT WAS REALLY GOING ON IN THE AMERICAN MARKETPLACE. IVORY-TOWERISM IS A TREMENDOUS RISK. UNIVERSITIES AREN'T IVORY TOWERS BY DEFINITION -- THEY HOUSE SIGNIFICANT NUMBERS OF FACULTY AND ADMINISTRATORS WHO WOULD LIKE TO REMAIN IN CLOSE TOUCH WITH AMERICA AND TO SERVE ITS MOST URGENT NEEDS AS IT COMPETES IN OUR NEWLY INTERNATIONALIZED MARKETS. THE ISSUE OF AACSB ACCREDITATION, WITH WHICH MOST AMERICANS ARE ENTIRELY UNFAMILIAR, MAY BE PULLING THEM AND

US IN THE WRONG DIRECTION AT THE WORST POSSIBLE MOMENT IN TIME. UNTIL THAT ISSUE IS SETTLED, MOREOVER, IT WILL BE IMPOSSIBLE TO GENERALIZE ON MORE SPECIFIC SUBJECTS HAVING TO DO WITH THE EDUCATION OF MANAGERS AND OTHER BUSINESS PERSONNEL.

EVEN AT UNIVERSITIES THAT DO NOT HAVE OR WANT AACSB ACCREDITATION, CONTACTS WITH THE WORLD OF BUSINESS AND INDUSTRY VARY WIDELY IN DEPTH AND SIGNIFICANCE. UNIVERSITIES TEND TO LOOK TO THE WORLD OF INDUSTRY AS A PLACE WHERE THEIR GRADUATES WILL HAVE TO FIND JOBS -- WHICH IN TURN WILL IMPACT ON THEIR ENROLLMENTS -- AND AS A PLACE WHERE THEY MUST SOLICIT GIFTS OF MONEY, EQUIPMENT, BUILDINGS, LAND, ETC. QUITE OFTEN, THESE CONTACTS ARE GOVERNED BY A QUID PRO QUO TYPE OF REASONING THAT CAN BE SUMMARIZED AS FOLLOWS: "BECAUSE YOU HIRE OUR GRADUATES, AND BECAUSE YOU HELP TO SUPPORT US IN OTHER WAYS, THEREFORE WE TRY TO PROVIDE THE SORT OF BUSINESS TRAINING FROM WHICH YOU CAN BENEFIT."

I DON'T THINK THE SUBCOMMITTEE ON EDUCATION AND HEALTH IS CONDUCTING THESE HEARINGS IN ORDER TO ENCOURAGE AN ATTITUDE THAT IFFY AND DETACHED. WHAT YOU ARE AIMING AT, IT SEEMS TO ME, IS A LEVEL OF NATIONWIDE AWARENESS IN WHICH THE PARTNERS -- BUSINESS, HIGHER EDUCATION AND GOVERNMENT -- ACTIVELY COORDINATE THEIR EFFORTS TO FURTHER THE HEALTH AND COMPETITIVENESS OF THE AMERICAN ECONOMY. FRANKLY, I DON'T SEE US AS BEING WITHIN

HAILING DISTANCE OF THE POINT AT WHICH THAT WILL BEGIN TO HAPPEN.

ONE VERY SIGNIFICANT REASON FOR THAT IS THE ADVERSARY ROLE CHOSEN SOME YEARS AGO BY THE U.S. DEPARTMENT OF EDUCATION. AN OFFICIAL OF THE DEPARTMENT RECENTLY OBSERVED, ON A PUBLIC PLATFORM, THAT IT THINKS OF ITSELF AS A KIND OF "ENVIRONMENTAL PROTECTION AGENCY" WHOSE ROLE IT IS TO SUPERVISE, CRITICIZE AND CONTROL THE SORT OF MISTAKES AND ABERRATIONS TO WHICH EDUCATORS AT ALL LEVELS ARE PRONE. I RESPECTFULLY SUGGEST THAT THIS IS A GOOD EXAMPLE OF A FEDERAL AGENCY TAKING SOME LIBERTIES IN DEFINING ITS MISSION. WHAT AMERICAN EDUCATION NEEDS RIGHT NOW, AND AMERICAN HIGHER EDUCATION IN PARTICULAR, IS A FEDERAL PARTNER RATHER THAN A FEDERAL ADVERSARY -- A DEPARTMENT OF EDUCATION THAT CAN COORDINATE AND FURTHER THE VERY MISSION ON BEHALF OF AMERICAN COMPETITIVENESS AND QUALITY THAT IS THE SUBJECT OF THESE HEARINGS.

FINALLY, I WOULD LIKE TO SAY A FEW WORDS ABOUT THE ROLE THAT UNIVERSITIES CAN PLAY IN THE RETRAINING OF CURRENT WORKERS, AND THE EXTENT TO WHICH STUDENTS CAN EFFECTIVELY TAKE PART IN THAT PROCESS.

IT WILL NOT COME AS NEWS TO ANY OF YOU THAT THE CONSTITUENCIES SERVED BY UNIVERSITIES INCLUDE A LOT MORE THAN FULL-TIME

UNDERGRADUATES AND FULL-TIME GRADUATE STUDENTS. THEY INCLUDE MANY ADULT FULL-TIME WORKERS WHO ARE SEEKING TO UPGRADE THEIR SKILLS THROUGH CONTINUING EDUCATION. IT'S A TRUISM IN THE WORLD OF HIGHER EDUCATION, HOWEVER, THAT THE PROGRAMS OF THIS NATURE REALLY WORTH BOTHERING WITH ARE THOSE THAT MEET AT LEAST TWO OUT OF THE FOLLOWING THREE CRITERIA: (1) THEY ARE PAID FOR BY THE COMPANIES FOR WHICH THE STUDENTS WORK. (2) THEY INVOLVE LARGE NUMBERS OF STUDENTS WITH A COMMON CURRICULUM. (3) THEY AWARD A CERTIFICATE OR DEGREE OF SOME KIND, SO THAT THE STUDENTS ARE MOTIVATED TO ATTEND AND TO TAKE THEIR STUDIES SERIOUSLY.

CONTRARY TO WHAT THE DEPARTMENT OF EDUCATION HAS BEEN SUGGESTING FOR SEVERAL YEARS, THE VAST MAJORITY OF THE UNIVERSITIES IN THIS COUNTRY ARE UNDER GREAT FINANCIAL PRESSURE AS THEY SEEK TO MEET THE EXPRESSED NEEDS AND DEMANDS OF THEIR STUDENTS AND THEIR STUDENTS' FAMILIES. IF THEY WERE TOLD TO ENGAGE IN REMEDIAL TRAINING AND EDUCATION FOR THOSE WHO DO NOT HAVE A CORPORATE SPONSOR AND WHO MAY NOT BE ABLE TO AFFORD TUITION ON THEIR OWN, MOST WOULD HAVE TO THROW UP THEIR HANDS AND DECLARE THAT THEY ARE EDUCATORS, NOT DIVINITIES.

IN OTHER WORDS, WHAT THIS COUNTRY OBVIOUSLY NEEDS RIGHT NOW IS A PROCESS IN WHICH REMEDIAL TRAINING AND EDUCATION IS CONSIDERED AS A POSSIBLE MANDATE FOR THOSE UNIVERSITIES

THROUGHOUT THE LAND THAT CAN MEET CERTAIN SPECIFIC REQUIREMENTS, INCLUDING THE MOST IMPORTANT ONES OF ALL: FULL COMMITMENT AND POWERFUL ENTHUSIASM. ONCE THE CONTENDERS HAVE BEEN IDENTIFIED, WE CAN MOVE ON TO PHASE TWO: DETERMINING HOW SUCH A NATIONWIDE EFFORT CAN BE FINANCED. WE DON'T WANT ANY KIND OF A BOONDOGGLE THAT LEADS NOWHERE. WE ALSO DON'T WANT TO BE KICKING OURSELVES AT THE END OF THE CENTURY BECAUSE WE NEGLECTED THE RESOURCE THAT MIGHT HAVE MADE ALL THE DIFFERENCE.

JUST AS OUR UNIVERSITIES HOUSE SIGNIFICANT NUMBERS OF FACULTY AND ADMINISTRATORS WHO PREFER TO KEEP IN CLOSE TOUCH WITH LOCAL, REGIONAL AND NATIONAL INDUSTRY, SO THEY HOUSE MANY FACULTY AND ADMINISTRATORS INTERESTED IN WORK THAT INVOLVES REMEDIAL TRAINING AND EDUCATION. BUT THOSE FACULTY MEMBERS AND ADMINISTRATORS HAVE BEEN KEEPING A LOW PROFILE IN RECENT YEARS BECAUSE STATUS AND MONETARY REWARDS HAVE GONE TO THOSE TEACHING HIGH-LEVEL GRADUATE PROGRAMS OR CONDUCTING SEMINARS FOR EXECUTIVES NEAR THE TOP OF THE CORPORATE PYRAMID. GETTING THOSE INDIVIDUALS TO EMERGE AND TO ASSERT THEMSELVES WILL BE AN INDEPENDENT CHALLENGE. FOR THE UNIVERSITIES THEMSELVES, IT WOULD REPRESENT A RESTRUCTURING OF PRIORITIES.

CAN STUDENTS BE INVOLVED IN RETRAINING PROGRAMS OF THIS KIND? MY ANSWER IS YES. UNDERGRADUATE AND GRADUATE STUDENTS ARE CURRENTLY INVOLVED IN ALL KINDS OF PART-TIME JOBS, OFTEN WITH

THE ASSISTANCE OF UNIVERSITY OFFICES DEVOTED TO WHAT IS CALLED COOPERATIVE EDUCATION. THERE IS NO REASON WHY THESE SAME HARD-WORKING AND DILIGENT STUDENTS COULD NOT BE INVOLVED IN THE EFFORT TO BRING MORE OF THE AMERICAN WORK FORCE UP TO SCRATCH WHERE INTERNATIONAL MEASURES OF COMPETITIVENESS AND QUALITY ARE CONCERNED. ONCE AGAIN, HOWEVER, SUCH AN EFFORT IS UNLIKELY TO SUCCEED WITHOUT THE SUPPORT, MORAL AS WELL AS FINANCIAL, OF THE FEDERAL GOVERNMENT, AND OF THE DEPARTMENT OF EDUCATION IN PARTICULAR.

CONGRESSMAN SCHEUER, MEMBERS OF THE SUBCOMMITTEE ON EDUCATION AND HEALTH, THE TROUBLED WATERS OF THE GLOBAL ECONOMY ARE A SURE SIGN THAT WE NEED TO RETHINK, ON A TRULY NATIONWIDE BASIS, WHAT WE ARE DOING TO TRAIN OUR FUTURE EMPLOYEES AND RETRAIN THOSE ALREADY IN THE WORK FORCE. WE NEED TO DEVISE A COOPERATIVE AND COORDINATED SYSTEM THAT WILL INVOLVE THE CORPORATE SECTOR, THE EDUCATION SECTOR, AND ALL LEVELS OF GOVERNMENT FROM THE FEDERAL TO THE MUNICIPAL. IF THE FIRST STEP WE ACHIEVE AS A NATION IS TO AGREE ON THE URGENCY OF THE TASK, THEN THE SECOND WILL BE TO COMMIT OUR ENERGIES TO THAT TASK, AND THE THIRD WILL HOPEFULLY BE A SUCCESS WORTHY OF THE UNITED STATES OF AMERICA.

I THANK YOU.

Representative SCHEUER. Mr. McMillan, we are very happy to have you here. We apologize for the delay.

Mr. Michael McMillan is executive director of the Human Resources Development Institute, as I said before, and has had a great deal of experience in remedial education to improve the job prospects for dislocated workers and return-to-work services for disabled union members.

Please proceed with your 5 minutes, and I am sure we will have some questions for you.

STATEMENT OF MICHAEL G. McMILLAN, EXECUTIVE DIRECTOR, AFL-CIO HUMAN RESOURCES DEVELOPMENT INSTITUTE

Mr. McMILLAN. I am pleased to have the opportunity to participate in these important hearings.

As the employment and training arm of the AFL-CIO, the Human Resources Development Institute is actively working on behalf of our 14.5 million members to find solutions to our nation's urgent retraining problems. Across the country, our affiliated unions are engaged in a broad array of retraining activities. These labor-involved programs offer important models for mobilizing the resources of the private sector in addressing retraining needs.

This committee is acutely aware of the massive changes occurring in our national world economy, and the tremendous challenge we face in preparing our work force for the future. We wish to urge this committee to recognize that a public/private partnership that includes the labor movement is a vital key to providing workers with the basic skills that are in demand. Training agreements, through collective bargaining, will play a growing role in addressing these work force needs in the years ahead.

As President Lane Kirkland of the AFL-CIO has stated, unions will be going to the bargaining table to negotiate learning time and learning programs along with work time. With 90 percent of the work force of the 1990's already out of school, we are going to have to depend more heavily than ever on training based in the workplace.

How can we develop the training potential in the workplace? We in the labor movement believe that that answer lies in cooperative efforts between labor, management, and government.

There is a tremendous amount of union-involved training that is already ongoing in the workplace. I would like to describe some of it. The apprenticeship system is a key component of our nation's effort to develop a highly skilled and productive work force. Today there are some 237,000 apprentices enrolled in 42,000 apprenticeship programs, most of them administered jointly by unions and employers. The annual investment in union-involved apprenticeship programs in the construction industry is over half a billion dollars a year. Several billion dollars a year are being invested in training under agreements that have been created at the bargaining table in a broad range of industries and occupations.

In my prepared statement to the committee we have described a number of these negotiated training programs, and I would like to list just a few: 45,000 auto workers have been trained through the Ford-UAW agreement.

Representative SCHEUER. Excuse me. How many UAW workers have become unemployed in the last decade?

Mr. MCMILLAN. I can get those figures for you, Mr. Chairman.

Representative SCHEUER. I understand it is 350,000.

Mr. MCMILLAN. It has been devastating to the UAW.

Representative SCHEUER. I read that figure of yours in your prepared statement, and I wondered why such a small percentage of the total inventory of displaced workers were actually trained by UAW. Your program came in for a lot of criticism a few weeks ago at one of these hearings. It was said that there was a hell of a lot of money but not much training.

How do you respond to the question I raised that UAW has retrained maybe 15, at the most maybe 20 percent, of the total number of your workers who became ex-workers?

Mr. MCMILLAN. I would defer to UAW and their agreements with Ford, GM, and Chrysler to give specifics, Mr. Chairman, on that.

Representative SCHEUER. They are not here, and you are here. What can you tell us?

Mr. MCMILLAN. A number of those sought early retirement. A number of those did not seek assistance in retraining. The skills they had acquired in the workplace in the plant were marketable in other areas such as subcontract shops.

But those are just my thoughts on it. The stats that UAW and Ford have—each of those programs they are run by autonomous training bodies, UAW-Ford, GM, and Chrysler—those bodies don't share a lot of information with one another.

Representative SCHEUER. Please proceed.

Mr. MCMILLAN. Twenty-seven thousand steel workers have been served in reemployment centers established with the steel companies. One thousand telephone workers in 60 cities are being served through the CWA-AT&T agreement. Five thousand New York City employees have taken classes through a negotiated agreement with AFSCME, District Council 37. And we are setting up an adult learning center at the George Meany Center for Labor Studies in Silver Spring.

Representative SCHEUER. Go ahead. I took some of your time.

Mr. MCMILLAN. Thank you. We are excited about this effort at the George Meany Center. With the support of the AFL-CIO, this one-room high-tech schoolhouse, we think will serve as a model for basic skills training of adults.

Many of labor's negotiated programs have tapped Federal, State, and local job training moneys to supplement their private funds that are negotiated.

Too often, though, in depressed industries they cannot provide private financing for retraining, and in that instance it is imperative that training funds from the public sector be made available, such as JTPA. Unfortunately, JTPA suffers from severe limitations both in structure and scope.

The Federal Government can best support the training efforts of labor and management by strengthening its role in six areas, and I would like to list those:

Policy development and planning—an important role for the Federal Government should be to identify and define national training needs.

Coordination and partnerships—and I won't go into detail because of time, Mr. Chairman.

The third area is innovative training approaches—models.

The fourth: It does no good to develop models if those are not shared. Why keep reinventing the wheel?

Fifth, national and regional approaches. We have to recognize that the geographic scope and severity of layoffs must provide for a national geographic approach rather than JTPA's system of dissemination through the States.

And sixth, strengthening current program: JTPA needs to be strengthened in a number of areas. And you have heard from our lobbyist on that issue.

The executive council of the AFL-CIO last month passed an unprecedented resolution on employment and training. That is the first time in history that the AFL-CIO has had a separate resolution on this subject. It called for opportunities to obtain better education, basic skills training, retraining, and skill upgrading. I think that just points up the AFL-CIO's commitment and the raising of this to a priority item on our agenda.

The need for retraining is clear, and so are the consequences if we ignore it. The labor movement stands ready to address these retraining needs on the scale that they deserve.

It is our sincere hope that Congress will acknowledge the contributions the American trade union movement has made to the training system of this nation and that we will be able to assume a major national role in planning and policy development to meet the future retraining needs of the workers of this country.

Mr. Chairman, with your permission, I would like to submit the resolution passed by the council as well as a brief statement on HRDI.

Representative SCHEUER. So ordered. It will be printed with your testimony.

Thank you very much, Mr. McMillan.

[The prepared statement of Mr. McMillan, together with the attachments referred to, follows:]

PREPARED STATEMENT OF MICHAEL G. McMILLAN

Mr. Chairman and members of the Committee:

I am pleased to have this opportunity to respond to your invitation to participate in these important hearings on workforce retraining needs. As the employment and training arm of the AFL-CIO, the Human Resources Development Institute is actively working on behalf of the 14.5 million members of the AFL-CIO to find solutions to our nation's urgent retraining problems. Across the country, the AFL-CIO's affiliated unions are engaged in a broad array of retraining activities. These labor-involved retraining programs offer important models for mobilizing the resources of the private sector in addressing retraining needs. We welcome the opportunity to share information with this Committee on these labor initiatives, and to describe what we see as the most pressing priorities for addressing national retraining needs.

By way of introduction, I would like to mention that the Human Resources Development Institute -- HRDI -- was created by the AFL-CIO 19 years ago. Our mandate is to put into practice the labor movement's philosophy of increasing access to employment and training opportunities for the unemployed and the disadvantaged. HRDI works actively with the public agencies, employers, school systems, and labor representatives across the country that comprise our national job training system. We provide technical assistance to assure that labor is able to contribute fully to the national training effort. We also operate a number of job training programs on behalf of concerned labor organizations.

These hearings are timely. We recognize that this country is experiencing employment upheavals that will have profound effects on the workforce for years to come. As you know, Congress has been considering a significant new worker readjustment program as part of the pending trade legislation. That proposed legislation would not address all of our retraining needs. But it does represent an important step toward establishing a framework to help workers adjust to changing skill requirements. We are hopeful that the readjustment legislation will be enacted, including advance notice to workers on impending layoffs. The recent downward trends in national unemployment rates mean nothing to the millions who are unemployed or locked in poverty level jobs because they lack marketable skills. In fact, the current 6 percent unemployment levels are still the highest in history for any recovery period.

One of the most important manifestations of the changes affecting our workforce is the mismatch between workers and jobs. We're seeing a rising demand for competencies in reading, writing, computational skills, and high-tech know-how. The result is that millions of workers face dislocation -- or will in the very near future. As the Joint Economic Committee has pointed out, that hardcore dislocation does not respond to general economic recovery. The key to overcoming the skill mismatch lies with retraining and basic skills enhancement.

At the same time, the complexion of the workforce itself is changing. The fastest growing members of the workforce include minorities, immigrants, and older persons. These groups are the least prepared to compete for the jobs that require more education. Again, retraining, basic skill upgrading, and English-as-a-second-language programs will be critical for these groups to gain a solid foothold in the workplace.

We in the labor movement are especially anxious to assure a national commitment to retraining. We feel we have a unique perspective to bring to the discussion, from our vantage point out in the workplace. We see the tragic effects of job loss on people who had worked all their lives to provide for their families. We see the heavy toll of dislocation on black workers, who are disproportionately represented in many of the hardest-hit industries. We see dreams shattered as men and women are forced from the working classes to the ranks of the economically disadvantaged.

Unions are also in a special position to intervene on behalf of the dislocated and disadvantaged. Unions are in daily contact with their members. They know workers' needs firsthand, and workers rely on their unions to provide for their employment and training needs.

The AFL-CIO has a strong and deep-rooted commitment to assisting those in need of training and retraining. Building on that historical commitment, labor has been working on several fronts to help people acquire the skills they need to meet the demands of today's changing workplace. These efforts are helping to reduce the trauma of unemployment for individual workers. They are also an important element in achieving our national goal of full employment.

In response to a growing desire for information-sharing on ways to meet the new challenges of the workplace, the AFL-CIO convened its first national Education and Training Conference last December. We at HRDI cosponsored that conference in cooperation with a number of AFL-CIO departments, bringing together some 250 labor leaders and training experts.

The conference pointed up the central role that joint labor-management programs are playing across the country and in a wide range of industries and occupations in addressing the changing skill requirements of our workforce. As AFL-CIO President Lane Kirkland observed, "unions will be going to the bargaining table to negotiate learning programs, and learning time, along with work time" in growing numbers in the years ahead. Negotiated agreements responsive to the needs of both employers and workers will be an important means of maintaining a skilled and competitive workforce.

The conference also underscored the critical role played by government as a partner in achieving our nation's retraining goals. Our experience has shown that public-private partnerships hold the key to retraining.

Labor has been attempting to take advantage of the retraining opportunities offered by the Job Training Partnership Act, which is currently the principal vehicle for those public-private partnerships. JTPA, unfortunately, suffers from severe limitations in both structure and scope. With its limited resources, only five to seven percent of eligible dislocated workers have access to JTPA's retraining services. Those who do get in the program are prevented from enrolling in meaningful long-term training courses by the lack of income support.

JTPA has equal difficulty serving the economically disadvantaged. A recent report from the National Commission for Employment Policy confirms that JTPA has had limited success in increasing the employability of the most disadvantaged groups, such as teenage parents and welfare recipients with large families. We agree with the Commission that JTPA resources are inadequate to address their needs effectively.

The JTPA system has widely ignored labor's potential contributions to the design and operation of training programs. Labor representation on JTPA planning bodies is generally at such a token level that labor has had difficulty forging a productive role in the system.

Nevertheless, organized labor has managed to make use of JTPA support to mount a variety of job training programs for unemployed and dislocated workers. A recent HRDI analysis showed that in Program Year 1986, labor organizations operated JTPA programs funded at $83 million.

Whether publicly or privately funded, labor's involvement in training and retraining can be seen as addressing three major policy goals.

First is labor's commitment to meeting the needs of new workforce entrants. To prepare youth for the world of work, organized labor is working to strengthen the basic educational preparation that our young people receive in school. Better communication between the schools and the private sector -- including employers and labor organizations alike -- can be important in strengthening the academic foundations laid by the schools.

Organized labor is also prepared to participate in national efforts to help welfare recipients move into productive employment. We have been following the welfare reform movement with interest. While we do not know how that system will evolve, we are hopeful that it will provide an effective framework for labor involvement.

A second major focus of labor's job training efforts has been in providing reemployment assistance to persons who have permanently lost their jobs in plant closings and layoffs. Some 2 million workers are laid off permanently each year, according to the Bureau of Labor Statistics. Unions have long recognized that their responsibility to their members does not end with a layoff. Unions have developed pre-layoff assistance for workers in a range of industrial settings -- from oil fields to food marts -- often with assistance from HRDI. Labor-sponsored programs offer job search training, peer counseling, career aptitude testing, retraining, and other services leading to new jobs. HRDI has conducted a number of these reemployment programs in cooperation with affected unions.

A third and growing concern for organized labor is the retraining of currently employed persons to help them maintain their competitiveness in a changing workplace. Unions recognize that they must help workers adapt their skills to the changing needs of their jobs. This applies not only to occupational skills, but also to the basic Three Rs.

As jobs demand an ever-higher level of basic skills, we will no longer be able to ignore the lower competency levels that have met our needs in the past. By some estimates, as many as 20 percent of all dislocated workers will require remedial education before they can qualify for new jobs. This is borne out by a 1980 Indiana University study, which found that one out of five working adults reads below an eighth grade level. Those reading levels are unlikely to be acceptable for the jobs of the future.

At the same time, it is clear that we cannot simply rely on the schools to meet the basic skills needs of our workforce. Ninety percent of the workforce of the 1990s is already out of school. In the years ahead, more of our nation's education will have to take place in the workplace than at school -- reflecting the increasing average age of the population and the educational needs of persons who are long out of school. Training in the workplace will play an ever-more-important role in sharpening the basic skills of American workers.

How can we develop the training potential that lies waiting to be tapped in the workplace? We in the labor movement believe that the answer lies in cooperative efforts by labor, management, and government. A tremendous amount of labor-involved training is already going on in the workplace.

The apprenticeship system is one of the oldest models for joint labor-management training, and it is a key component of the nation's efforts to develop a highly skilled and productive workforce. Today there are some 237,000 registered apprentices being trained in 42,000 programs. Those programs, most of which are administered jointly by unions and employers, offer a combination of on-the-job training and classroom instruction in over 800 occupations. Nearly two-thirds of the registered apprentices are learning building trades skills. The annual investment in union-involved apprenticeship programs in the construction industry is over half a billion dollars, based on estimates by the AFL-CIO Building and Construction Trades Department.

In addition to apprenticeship, other types of negotiated training and job security agreements make up another major component of this nation's retraining efforts, and a growing one. Although precise figures are not available, our best estimates indicate that several billion dollars a year are being invested in training under negotiated agreements. These types of training agreements have existed for about 10 years in some industries, but the number has grown in recent years as a way of coping with changes in the workplace. These retraining and job security programs have saved the jobs of tens of thousands of workers in the past five years. By reducing turnover and increasing productivity, the agreements also benefit the participating employers.

Training agreements have been created at the bargaining table in a broad range of industries and occupations. Some focus on skill training and upgrading for the existing company workforce. Others offer retraining for those who have been laid off. Some address workers' basic educational needs, or help workers sharpen rusty reading and writing skills. Others assist the non-English-speaking.

One of the best-known negotiated agreements was the 1982 agreement between the United Auto Workers and Ford Motor Company, establishing the so-called Nickel Fund. The agreement covered 109,000 active and laid-off Ford employees, and was notable in addressing human service needs as well as job training and retraining. With financing from a per-capita contribution -- actually 15 cents an hour now, not a nickel -- $120 million has been generated in the past three years. Under the agreement, 45,000 workers have taken part in training, retraining, and other programs since 1983 -- 5,000 of them in basic skills programs at 35 plant sites around the country.

Substantial training investments have also been negotiated elsewhere in the auto industry. General Motors has contributed $200 million a year under an agreement with the UAW. Chrysler and the UAW operate 14 different programs in the areas of job skills, basic education, and personal skills.

The recent UAW contracts negotiated this fall with GM and Ford include even stronger training provisions.

A number of other major industries have implemented similar types of programs. The negotiated agreement between the International Brotherhood of Electrical Workers and AT&T provides for training and career development services to help workers adapt to the company's changing skill needs. Likewise, the Communications Workers and AT&T are jointly administering a $6 million-a-year education and training program under a 1986 agreement. Some 1,000 persons are now enrolled in the CWA/AT&T program in 60 cities, with the number expected to grow. In their 1986 agreement with Pacific Bell/Nevada Bell, the Communications Workers accepted greater flexibility in retraining workers for new jobs, in exchange for the company's agreement not to lay off any union members.

In the hard-hit steel industry, over 50 reemployment centers were established under agreements between the United Steelworkers of America and major steel companies, serving some 27,000 persons. HRDI has been pleased to work closely with the Steelworkers in assessing the retraining needs of their members and designing programs in several of these sites. We are currently operating five worker assistance centers on behalf of the Steelworkers in Ohio and Texas.

A number of other unions have established national training agreements. For example, members of the Graphic Communications Workers' Union in more than 60 cities are participating in upgrading, retraining, and supplemental education and training programs. In the building trades, the Plumbers Union operates a $54 million-a-year national training system of 330 local schools.

Another case in point is the Lifelong Education and Development (LEAD) program negotiated by the Service Employees International Union. LEAD offers adult literacy, high school equivalency, and English-as-a-second-language instruction. The program also provides health care apprenticeships and other services to enhance the professional development of these workers, and in some cases, training and counseling for unemployed members. Local unions have negotiated variations in the basic LEAD proposal. For example, one local prevented displacement of 40 hospital central supply aides through a retraining and upgrading program that moved workers into higher level positions in another department.

In some cases, local unions have been able to create retraining services for workers in their immediate region. District Council 37 of the American Federation of State, County and Municipal Employees negotiated an education fund with the New York City government. That fund has provided educational opportunities to more than 5,000 city employees. Courses include adult literacy, basic education, high school equivalency, and other training to improve workers' employment and career advancement prospects.

Many of these negotiated programs have tapped federal or state job training monies to supplement their private financing. Sometimes, though, depressed industries cannot provide private financing for retraining. Then the public training funds are critical.

That public support made possible the creation of a unique Consortium for Worker Literacy -- a project conceived and operated by eight unions in New York City. The eight labor organizations represented workers employed mainly by small firms engaged in trucking, the garment and textile industries, hotel and restaurant work. Using adult education monies made available by the city and state, the consortium helps workers upgrade their basic education skills so they can avoid layoff.

Some unions operate their own national training schools. One such school is the Seafarers' Harry Lundeberg School of Seamanship at Piney Point, Md. The school allows union members to upgrade their skills through adult education, English-as-a-second-language courses, remedial reading, and other classes. Some 1,800 members of the Seafarers International Union have earned high school equivalency diplomas through the school.

We at HRDI are currently setting up an adult learning laboratory at the George Meany Center for Labor Studies in Silver Spring, Md. With support from the AFL-CIO, this one-room, high-tech schoolhouse will serve as a model for adult basic skills remediation. Instruction will be self-paced and computer-assisted, and will make use of competency-based learning modules. Our goal is to make the model available to interested unions and employers in a variety of workplace settings.

HRDI is also closely watching the interagency technology transfer effort-- mandated by Congress -- that is exploring civilian uses for educational technology that was developed for the military. We recently agreed to work with Ford Aerospace and Florida State University on an advisory group that will adapt the military's Job Skills Education Program to civilian settings.

Organized labor recognizes that programs like these, financed chiefly by the private sector, represent the great majority of workplace-based retraining programs. Private support may outweigh government funding by as much as a ten-to-one margin. Nonetheless, we are also convinced of the importance of a well-defined federal government role in retraining. The federal role is most critical in defining national policy objectives and in providing financial support to meet retraining needs that the private sector cannot address.

The federal government can best support the retraining efforts of labor and management by strengthening its role in six areas:

(1) Planning and policy development: An important role of the federal government should be to identify and define national retraining needs, as a means of enabling our nation's resources to be directed toward meeting those needs.

(2) Coordination and partnerships: Recognizing the importance of effective coordination between labor, business, and education in meeting the nation's retraining needs, a key federal responsibility must continue to be to develop and expand mechanisms that bring these parties together to address our retraining priorities.

(3) Innovative program approaches: Funding should be offered to support model approaches for addressing retraining needs.

(4) Information sharing: Equally important as developing model approaches is the development of channels for sharing the techniques that work -- so no one has to reinvent the wheel.

(5) National and regional approaches: We must recognize that there will always be certain retraining needs whose severity or geographic scope require national solutions. The federal government must continue to take an active role in addressing such problems.

(6) Strengthening current programs: Existing federal training and retraining programs, such as JTPA, must be strengthened and provided with adequate support so they can make maximum impact on our nation's retraining problems. The planning and operational framework of these programs must be improved to assure an opportunity for effective participation by labor organizations in the delivery of training and retraining services.

The labor movement considers retraining to be one of our nation's most pressing policy issues. As just one indication of labor's intense concern on this point, it is noteworthy that the AFL-CIO Executive Council made a special report to the AFL-CIO Convention in Miami Beach last month on the subject of employment and training policy. This is the first time that the convention highlighted our concerns about job training in a separate resolution, rather than including the topic in the general economic policy statement.

In those recommendations, the AFL-CIO Executive Council expressed labor's concern that all workers -- employed and unemployed -- must have the opportunity to obtain better education, basic skills, training, retraining, and skill upgrading. It will clearly take a concerted effort by all of us -- unions, employers, schools, and government -- to transform these goals into reality.

We feel this is a compassionate society -- as evidenced by the concerns voiced before this Committee over the past several weeks. We sense a growing awareness that the quality of life for rich and poor alike is threatened when the employment needs of a substantial segment of society go unanswered.

The need for retraining is clear. So are the consequences if we ignore it. The labor movement stands ready to address these retraining needs on the scale they deserve. It is our sincere hope that Congress will acknowledge the contributions that the American trade union movement has been making to the nation's training and retraining system, and will look to us to assume a major national role in planning and policy development to meet the retraining needs of the workers of this country.

Mr. Chairman, with your permission I would like to submit with my testimony a copy of the AFL-CIO Convention Resolution on Employment and Training and a brief statement on the Human Resources Development Institute.

Adopted by the AFL-CIO Convention
in Miami, Florida
October, 1987

Employment and Training

Changes in the structure of the American economy increase the need for worker training and education and for jobs at the end of training. Technology is eliminating many jobs, changing other jobs, creating new jobs and new occupations. Rising trade deficits increase pressure to adopt new technology and upgrade the skills and the productivity of American workers. Persistent high unemployment challenges the nation to expand job creation faster than labor force growth.

To meet the nation's employment and training needs, the AFL-CIO is calling for sustained action on a number of fronts:

Full Employment: National economic policies—fiscal, monetary, trade, infrastructure, training and labor market policies—must be aimed at full employment, in line with the mandate of the Humphrey-Hawkins Full Employment and Balanced Economic Growth Act of 1978.

Community service, community facilities, and infrastructure programs funded by local, state, and federal governments can make significant contributions to full employment policy in addition to their important economic and social contributions.

If private and public sector employment is not sufficient to provide jobs to all those who want to work, the federal government must be the employer of last resort.

Plant Closings: To protect workers and communities adversely affected by plant closings and mass layoffs, Congress must enact effective plant closing legislation, including strong advance notice requirements and worker adjustment assistance programs. Action is needed also to stop tax incentives for plant closings, protect workers' health and pension rights, assure union successorship and provide other protections and help for workers and communities hit by plant closings and mass layoffs.

The best possible plant closing provision must be adopted. At minimum the Senate provision in the Omnibus Trade Act should be enacted. The measure requires employers in plants with 100 or more employees to provide 60 days notification of a plant closing or mass layoff. This measure represents a modest but important beginning step toward more comprehensive measures designed to provide both early notification and consultation.

Economic conversion planning is a rational and responsible effort to deal with plant closings and mass layoffs in defense plants and military bases and other government facilities. Legislation is needed to require development of standby economic conversion plans for defense-related plants and other government facilities.

Training: All workers must have opportunities for training and education to get jobs, to keep jobs, and to get better jobs. Human resource and productivity improvement must be achieved through better education, basic skills remediation, training, retraining, upgrading, and opportunities for upward mobility for all workers, both employed and unemployed.

Trade unions have important responsibilities for supporting, protecting, and promoting training and education programs for their members and for potential members. Employers and local, state and federal government agencies also have basic responsibili-

Labor Market Institutions: Efficient labor market institutions can improve the matching of workers and jobs.

We reaffirm our longstanding commitment to the goal of federalizing the employment services to meet the nation's need for a truly national labor exchange operating across state and regional boundaries. We oppose proposals to "devolve" or defederalize the funding of the costs of administering unemployment insurance and job service programs. Such proposals would lead to the destruction of the present federal state system and drastically reduce services to workers and employers.

The U.S. Employment Service system must become the recognized, accepted, adequately financed source of free, employment-related services for all workers who need jobs and for all employers who need workers. The Employment Service should be federalized to meet the nation's need for a truly national labor exchange, operating across state and regional boundaries.

We oppose defederalization of the USES as proposed by the Reagan Administration, which would destroy the present federal-state system and drastically reduce services to workers and employers.

The Job Training Partnership Act of 1982 with its business-dominated structure, its lack of income support during training, and its inadequate funding does not meet the nation's employment and training needs. Labor organizations, however, have a responsibility to make this faulty system serve workers' needs as well as possible until the JTPA-Private Industry Council system can be improved or replaced. Labor representation on the PICs should be equal to business representation.

Day care opportunities for children of working parents must be available. Federal action and support are necessary. Progress can often be achieved through collective bargaining.

Anti-discrimination programs, equal employment opportunity and affirmative action programs are necessary and should be vigorously enforced to help black, Hispanic, women, older workers and others who need these protections.

The AFL-CIO calls for action in all these areas to increase employment and training opportunities for America's working people.

THE HUMAN RESOURCES DEVELOPMENT INSTITUTE, AFL-CIO

Since 1968, The Human Resources Development Institute (HRDI) has served as the employment and training arm of the AFL-CIO to help bring labor's resources to bear on the training needs of the unemployed. Over the years HRDI has worked closely with international unions, state and local labor organizations, and the Departments of the AFL-CIO, to bring labor's considerable experience in training and knowledge of labor markets to the nation's employment and training programs.

HRDI has provided training to labor leaders on critical job training issues from every state and assisted labor to become directly involved on the decision-making bodies, at the state and local level, that plan training programs. HRDI's ties to labor's nationwide network has enabled the Institute to provide the Congress and the U.S. Department of Labor with a better understanding of the impact of policy choices and program planning decisions on workers as well as the unemployed.

In addition to its education, training and technical assistance efforts with labor organizations and the employment and training system, HRDI has administered training programs ranging from targeted outreach programs for apprenticeship training to programs for youth, ex-offenders, the disabled and programs for the nation's dislocated workers.

A major focus for HRDI since the enactment of the Job Training Partnership Act has been to serve the reemployment needs of workers who have lost their jobs due to a plant closing or permanent lay-off. At the request of local unions, the Institute has provided needed information on available training and support services to over 15,000 laid-off workers through worker assistance workshops. In late 1984, HRDI established its first worker assistance program for dislocated workers in Southeast Texas. HRDI currently operates 6 such programs at 12 sites in Texas, New Mexico, Louisiana, Ohio, Wisconsin, and Mississippi. Over 4000 workers have found jobs through these programs at an average wage at placement of $8.85, well above the national average.

The reemployment needs of the disabled have also been a focus for HRDI over the last 10 years. Operating under a grant from the U.S. Department of Education. this national program, which includes direct reemployment services in 5 locations, is currently participating in a major demonstration program with Columbia University to test the effectiveness of a union-involved early intervention reemployment strategy for those who have been disabled due to injury or illness.

In recognition that jobs with a future require a higher level of basic skills than were required in years past, HRDI has begun to test innovative approaches to provide individuals with these critical skills. As part of this effort, HRDI has incorporated a computer-based basic skills component in 5 of its dislocated worker centers. The Institute will also install a learning laboratory at the George Meany Center for Labor Studies in Silver Spring Maryland, to develop and test curriculum for adults lacking these skills.

Through its ongoing involvement in the national job training system on behalf of organized labor, its considerable experience in providing reemployment services, and its commitment to seeking out new and effective approaches to job training, HRDI is uniquely positioned to take a leading role in the nation's future in job training.

Representative SCHEUER. Mr. William Spring, you were introduced before you arrived. You are vice president of the Federal Reserve Bank of Boston, the District Community Affairs Department, coeditor of a book entitled "The Political Economy of Public Service Employment." You have lectured and written widely.

We are delighted to have you. Please take your 5 or 6 minutes, and then we will have some questions for the whole group.

STATEMENT OF WILLIAM SPRING, VICE PRESIDENT, DISTRICT COMMUNITY AFFAIRS, FEDERAL RESERVE BANK OF BOSTON

Mr. SPRING. Mr. Chairman, as one who has often used the work of the JEC, let me say that it is a particular pleasure to testify before the committee. And as one worked with Senator Gaylord Nelson on employment legislation and worked with you on the Scheuer amendment, the New-Careers Program, it is a particular personal pleasure to have this chance to discuss where we go from here in employment policy.

Representative SCHEUER. I thank you very much. It is nice to know that someone remembers it.

Mr. SPRING. In Employment and Poverty Subcommittee hearings, which were held around the country in those days, the New-Careers Program was always one that was a pleasure to hear discussed. Witnesses would come before the committee who had been on welfare or in deep despair and who, through the New Careers Program, had access to training and a professional career. And although money was short and often the career they trained for wasn't expanding as rapidly as hoped, the concept was right. You deserve a lot of credit for having developed the legislation and supported the program.

Representative SCHEUER. I thank you very much. I think in looking back at the New-Careers Program from the vantage point of perhaps 20 years of history, the basic intellectual underpinnings of that program were very well taken. It was sound, and we ought to expand on it today.

Mr. SPRING. Though I work for the Federal Reserve Bank in Boston, I am not here testifying on behalf of the Federal Reserve System, but rather as a technical expert, or at least as someone who has put kids through college while working within the—I am not sure there are any real experts in this field, sir——

Representative SCHEUER. There may not be many experts, but there are varying degrees of ignorance. [Laughter.]

Mr. SPRING. Talking about degrees of ignorance, I postponed my exposure to the private sector and to the local operation of the employment and training programs until after working on national education, employment and training legislation in the Senate and the Carter White House. That was probably wise on my part because I am a lot less confident now than I was then that I know what ought to be done in Federal law.

I have been asked by the Committee to talk briefly today about the Boston Compact. The purpose of the compact is to improve the quality of education within the Boston Public Schools. Not only the business community and the city have signed agreements with the schools, but the Area Building Trade Unions have as well—have increased by more than 5 percent a year the number of high school students going directly into joint apprenticeship programs—but the universities major participants in drafting the first compact agreement also have one of their own with the schools and are committed to increasing the number of young people going on to college and staying in school.

But today I want to talk about the school transition piece of the compact because I think it should be of real interest to this committee. If you would turn to page 3 of my prepared statement, there is a chart which compares the employment population ratios for the graduates of the class of 1985 in the country and in Boston. If you are familiar with unemployment figures, you understand that the Bureau of Labor Statistics require that to be counted as "unemployed" [is] you have to have looked for work in the last month. Young people are often discouraged in their——

Representative SCHEUER. Page 3?

Mr. SPRING. Of my prepared statement, yes, as delivered to the committee this morning. You may have an earlier draft. There is a chart in the first couple of pages which——

Representative SCHEUER. The employment population ratios?

Mr. SPRING. Yes. The employment-population ratio is probably a better measure of labor market experience of young people than the traditional unemployment rate. As you know, to be counted as "unemployed" by the Bureau of Labor Statistics you must first be counted in the "labor force," that is you must report some positive step to find work in the last month. There are problems in determining whether or not young people are really looking for work. First, usually some adult answers the household phone when the BLS calls and may not know what the young person has done. Second, a young person who really wants a job may be discouraged when he or she doesn't find one and so drop out of the labor force, by the BLS formal definition, while still hoping for work. The employment-population ratio avoids these difficulties by asking what percentage of the entire group is working.

In the country as a whole, in October 1985, only 28 percent of the black high school graduates, those who had stayed the course, were employed, compared to 52 percent of white graduates, a 24 point difference.

In Boston at the same time, 62 percent of whites had jobs, 10 percent better than the national average; and 60 percent of the black graduates had jobs. And this is a school system where the blacks are about 50 percent of the graduates. In Boston, then, there is almost equality in employment between black and white high school graduates 4 months after graduation. We are talking about an inner-city population, almost all of whom are disadvantaged, white and black, 70 percent JTPA-eligible.

What has been done is the establishment of a school-to-work transition program with the following elements:

First, it begins with measurement. As Willard Wirtz used to testify before this committee "we only do what we measure." In Boston, we now measure the performance of the schools on terms of attendance, academic gains, measure universities on public school graduate enrollment and retention, and the private sector on finding jobs for students and graduates.

There has been, since 1985, an annual survey of all June graduates in the fall. We reach about 82 percent of them. So we now know what happens to our young people after school. I don't think there is another school system in the country doing that.

In Boston, the success of our collaborative efforts to help young people in high school is measured by their success in finding jobs and/or going on to college. This past year about 95 percent of our graduates were successful in these terms.

[Now] An essential purpose of going to high school is being successful in college, on the job or [in] some combination of those two.

Second, the private sector leadership, through the Private Industry Council (PIC) has made a commitment communitywide to take a responsible role in the school-to-work transition. It began with a commitment to 500 jobs in the summer of 1981. We are now up to 3,000 jobs for the summer of 1987, with over 700 firms participating.

We have in each high school a career specialist, on the PIC payroll, half paid by the school system, whose job it is to coach young people as they begin their working lives, and to represent them to employers.

Employers are not reluctant to take people they believe can do the job. These are not guaranteed jobs, but rather opportunities for work for which we prepare young people through a series of work experiences, including summer, and part-time jobs after school. By the time most of these inner-city kids are presented for the job interviews after graduation, they have mastered the very element of working, they have been through that developmental process.

Why is the business community's job commitment and the Career Service so critical? Middle-class kids have their parents to advocate for them in the job market. Young people from poverty neighborhoods have no one to advocate for them. Economists tell us a good market is one in which buyers and sellers have perfect information about price and quality. In the youth labor market, especially for poor and minority kids, both sides not only lack information, they have inaccurate, hostile stereotypes of one another. Downtown employers view inner-city kids—it doesn't need to be described here and kids often think employers are racist.

It is necessary to build a bridge between the two, and that is what we have done in Boston.

Let me say this about the private sector before I close. I, having worked for some 10 years here in the Senate, had the view that the private sector was seeking its own special interest, that something given to the private sector was taken from labor or the community. In Boston and other cities in which compact efforts are being developed, private sector leaders are more than willing to structure access to jobs for inner-city young people if that contribution is going to lead to improvement in the schools. Through such collaborations of sectors—business and community, school and government—benefit.

If you ask me what the Federal role ought to be, I think that while the school-to-work transition effort is not terribly expensive, it is not free, and Federal dollars to help pay the cost of the Career Service—we are using some JTPA money now—in cities where school and business leaders are committed to measurable improvement will be a help. Remedial education requires, at a minimum, small classes, dedicated professionals with time and encouragement to work together, community support and access to the best teaching techniques. Federal dollars could help.

The critical thing is improving education for low-income young people in the public schools. There is no city in the country that does it well citywide. But, in Boston we are united in trying very hard to make progress.

Thank you very much.

[The prepared statement of Mr. Spring, together with attachments, follows:]

PREPARED STATEMENT OF WILLIAM SPRING

The Boston Compact Careers Service: Education, Training and "Hard-Core" Youth Unemployment

Let me begin, Mr. Chairman, by thanking you for this opportunity to speak on the Boston Compact and education, training and employment for youth. Since 1963 I have been working on issues relating to education and training, as a staff member for former Senator Gaylord Nelson of Wisconsin in his office and on his Employment Subcommittee, with the Teacher Corps in the then Office of Education, and on the Domestic Policy Staff in President Carter's White House.

Now I serve as District Community Affairs officer at the Federal Reserve Bank of Boston. My responsibilities lie mostly in the area of encouraging banks to help meet the credit needs of low-income and moderate-income neighborhoods. However, Mr. Frank Morris, president of the Bank, is very interested in the role that education and training play in the city and regional economy. When he was chairman of the Council that coordinated Boston's school-business partnerships, I served as the organization's president. And, again, when he was chairman of the Boston Private Industry Council, I served as the organization's president. Both organizations played a role in the development of the Boston Compact.

Although I work for the Federal Reserve System, I want to state clearly that I am here today at the invitation of the Committee to speak about what we have been doing in Boston and its relevance to the dilemmas of so-called "hard-core" youth unemployment. My views are not necessarily those of the Federal Reserve System or the Federal Reserve Bank of Boston.

Today's hearing concerns retraining the hard-core unemployed. I would like to begin by broadening the discussion to include a consideration of the institutions that serve all our working youth. It has been our experience in

Boston that the education and labor market institutions serving all young people who do not go on to full-time education immediately after their high school years are not adequate. In Boston, and across the country, that means well over half of our young people. While we spend substantial amounts of money on programs that help each person who gets into college - some estimates range as high as $4,000 per student per year - we spend next to nothing to assist those going directly into the labor force. If we are to make extra efforts pay off on behalf of those who are facing the greatest difficulties, we must first build a system that helps everyone.

The Boston Compact

The Boston Compact's purpose is to improve the quality of education in the city's public schools. To that end, school, city government, university, union and business leadership have signed agreements, Compacts, if you will, committing themselves to attempting to make measurable progress in attendance, academic achievement in school, and success in finding jobs and in enrolling in college. By far, the most important part of this effort is taking place within the schools. Mastering the basics, gaining confidence in one's ability to reason and learn, and understanding our democratic heritage are absolutely crucial. Partners can help schools with these fundamental efforts. But the responsibility lies with teachers and with educational leadership.

Employment of High School Graduates: U.S.A. and Boston

An important factor in young people working hard in school is their perception of the payoff in the job market, and it is about the transition from school to work that I want to speak today. In 1985 the Bureau of Labor Statistics did a special analysis of the fate in the labor market of that year's June graduates. They found that white graduates faced a

15 percent unemployment rate in the October following graduation. Hispanic graduates faced 26 percent unemployment. Black unemployment among June graduates of high school stood at 50 percent. As you know, persons cannot be "unemployed" by the official definition unless they are first "in the labor force," that is, unless they have taken an active step to look for work in the past month. Young people are often discouraged by failure to find work and so, black youth labor participation rates are often very low. So it is helpful to look at employment as a proportion of the entire population when trying to understand youth unemployment. In the same BLS study, in the October following graduation for the class of 1985, the white employment/population ratio was 52 percent, and the black ratio was only 28 percent across the country.

In Boston, by contrast, after three years of building a public-private structure for school-to-work transition, the employment/population ratio for white high school graduates of the class of 1985 was 62 percent, a full 10 points above the national numbers. And the employment/population ratio for black graduates was 60 percent, only 2 points less.

Employment/Population Ratios for Class of 1985
in the October following Graduation

	U.S.A.	Boston
Whites	52%	62%
Hispanics	43%	54%
Blacks	28%	60%

Remember, we are not talking here about "hard-core" black youth facing a 28 percent employment/population ratio. We are talking about high school graduates. In our view, it is wise to build a system of school-to-work transition that helps all young people effectively, while at the same time providing the additional assistance, especially educational assistance, that those in deeper trouble require.

The Youth Labor Market

How can it be that the Compact can make such a dramatic difference? Let me try to answer that question by describing the nature of the youth labor market. Economists tell us that the ideal market is one in which both buyers and sellers have perfect information. But we know that information is not perfect and it is not free. Most middle-class professionals work in a specialized job market where information is available, often on a national basis. If the Joint Economic Committee is looking for an economist with public policy experience, you would be no more than one hour and four phone calls away from getting solid information on any candidate. But the youth job market is not like that, especially the youth job market as seen by inner-city young people. Again, for middle-class families, the parents are the best job developers. They use their contacts to line up opportunities for their children. But for inner-city young people, whose parents may be absent or on welfare, and in any case, seldom have downtown contacts, where are they to turn? Even more serious than lack of accurate information on both sides of the youth market is the existence of strong negative stereotypes in the minds of both employers and students. The Boston Compact's career service bridges that gap in information and contact, bringing inner-city young people into the employment offices of downtown firms where they are given serious consideration.

Measurement and Goal Setting

How is this being done in Boston? The first principle is one of measurement. As former Labor Secretary W. Willard Wirtz used to say, "We only do what we measure." Before the signing of the Compact the only information available on the practical results of education in Boston - whether young people got jobs or went on to college - came from a student questionnaire administered at graduation. As they handed in their math and social studies books, students were basically given three choices: did they plan to go to college, to work, or to "other." Not surprisingly, about half checked college and half checked work. Whether those plans worked out or not, what the unemployment rate of graduates was, no one knew. Now, as part of the Boston Compact's commitment to keep track of the numbers, an annual survey of high school graduates is conducted in the fall. About 80 percent of the graduates are reached. And it is from this survey that we have the information to match the BLS national data. Knowing in some detail what happens to graduates is crucial to measuring the effectiveness of our efforts. The information gained from the survey is of vital interest in Boston because it is through the survey that we measure how successful we have been in meeting our goals for employment.

The Career Specialists

The survey is conducted by the school-based career specialists who are the backbone of the Boston school-to-work transition effort. There is a specialist working in each high school, full-time, year-round, with the responsiblity to provide information on jobs to the students, to coach them in interviews and resume methods, to develop jobs, arrange interviews and help them once they are employed. The career specialist is the face-to-face contact who bridges the gap between downtown employer and innner-city young person. The career specialist works on the payroll of the Boston Private Industry Council, but about half the cost is paid by the Boston Public Schools (through a contract with the Council), and the career specialists are jointly hired by the high school's headmaster and the Private Industry Council.

The Role of the Boston Private Industry Council

The Boston Private Industry Council, which includes on its board a number of the city's leading business figures and the Superintendent of Schools as well as representatives of community-based organizations, city and state agencies and colleges, was the place where the concepts behind the Compact were discussed in depth and over time. The career specialists are the operating arm of the program. The effort itself is made possible by the collaboration of school and business leaders. The commitment of Boston's private sector to "priority hiring" for Boston Public School graduates and to the organization of summer jobs and part-time employment opportunities after school made it possible to gain the participation of hundreds and hundreds of individual firms. Only with a very large number of firms acting in concert - to use the phrase of the Boston Private Industry Council's founding chairman, William S. Edgerly - can it be hoped to make a system-wide difference.

The jobs side of the Compact began with a private sector summer jobs effort in the summer of 1981. The business leaders on the Private Industry Council committed themselves to recruiting 500 summer jobs for high school students in need of work and who had acceptable attendance. Over the years the summer jobs program has grown so that there are now more jobs organized through the Compact in the private sector than there are federally supported summer youth jobs in Boston. This past summer the city's business community found 3,010 jobs with 669 firms participating.

About one-third of those young people who have summer jobs stay on with the same firms in part-time positions after school hours during the year. These part-time jobs are very important because it is only through experience on the job that most young people learn about work discipline. Mastering work discipline is a developmental process that takes time. It is not, fundamentally, a matter of information but of habit. By the time they graduate, most of Boston's public school students who are going directly into the working world have developed into dependable workers.

Boston firms who hire public high school graduates are asked to give them "priority" only in this sense: they are exempted from competition with other job applicants. Firms are expected to hire only young people who meet their minimum requirements and who they judge able to do the work.

In 1986, Compact hires of graduates totaled 967, with an average wage of $5.43 an hour. Less than ten of these jobs were in retail food. Most were with large and middle-sized firms where, once hired, a hard worker has a good chance to advance within the firm and to get financial help to continue his or her education at a college.

European Youth Programs

The joint commitment of the Boston business and school communities to assisting in the transition from school to work, in assuming responsibility for the fate of the city's young people in the job market, is a relatively new idea in this country. However, it is widely accepted in Europe. In Germany, for instance, dating back to the 19th century, young people not going on to universities are provided two or three years of paid apprenticeship, with a day a week at a vocational school, leading to a certificate of mastery that is quite seriously respected. About half of each age cohort goes through this "Dual Apprenticeship" system. And so, in Germany, rather than unemployment being highest among youth, it is, in fact, very low. In Great Britain, the Thatcher government, facing youth unemployment rates absent government intervention of nearly 50 percent, now provides two years of on-the-job training in private firms, with continuing classroom instruction, for all "school leavers" who apply.

School Improvement

Superintendent Laval Wilson's new Education Plan, approved in large part by the School Committee last June, will concentrate on basic reading and math skills and hold teachers and schools responsible for progress on attendance and achievement goals. Our hopes for improvement in the Boston schools are carried in that plan.

The commitment to improved education in Boston is now very wide. The community of colleges and universities have signed an agreement stating as a goal a substantial increase in college attendance by Boston public school graduates, and they are working hard to help inform students about what courses they need to study and what financial aid is available. They also are helping those who have gotten into college to stay there. Area Building Trades Unions have pledged a 5 percent per year increase in the number of young people going directly from high school into apprenticeships, and they have been as good as their word. And, through the Boston Plan for Excellence in Public Education, an educational fund, the private sector has contributed some $9 million for scholarship help, grants to teachers for innovative programs, and other assistance to the schools.

But the problem of school dropouts remains very serious, with some 43 percent of each class leaving before graduation and with no educational forwarding address. For students who are two or more years behind in reading when they begin 9th grade, the promise of a job is by itself not enough: major educational assistance is required to keep them in school, or to help them continue learning in an alternative setting if that is their choice.

In Boston, Mayor Raymond Flynn and the Superintendent have begun a $2 million program with the stated goal of cutting our dropout rate in half and doubling the number of seats in alternative education. On a pilot basis, beginning at English and Dorchester high schools in 1984, the "Compact Venture" program has made a concentrated effort to help 9th graders who are two or more grades behind in reading. At these schools the dropout rate for at-risk students in the Compact Venture program has averaged 12.6 percent over two years, a substantial improvement over the 19 percent dropout rate among at-risk young people in the same schools who were not in the program. In essence this program is straightforward: A team of teachers is given the time to know a group of students well, help in the form of a caseworker to counsel the students and work with their parents, and the mandate to instruct students on an individual basis rather than expecting them to deal with a high school curriculum for which they are unprepared. We hope these gains will be maintained as we expand the program to nearly all 9th grades in the city.

Origins of the Compact

Many of the concepts behind the Boston Compact were developed during the Carter Administration as part of the work of Vice-President Mondale's Task Force on Youth Employment. For nearly a year, a team that included Department of Education and Department of Labor representatives gathered the experiences of people concerned with the education, training and employment challenges facing low-income youth. Roundtables at the local level -- with business, school, employment and training and community leaders -- and intense and prolonged discussions in Washington with research institute and university experts and staff from Congressional and interest group offices -- and the carrot of $2 billion dollars of new money -- resulted in the proposed Youth Act of 1980. The bill passed the House but not the Senate.

The key to the Youth Act was that school and employment experiences for low-income young people must be planned together with remedial educational efforts -- developed by classroom teachers in the schools -- linked to assured access to job opportunities for students who make the effort. It was proposed that individual high schools compete for Federal remedial educational money, and that Private Industry Councils play a role in the consideration of both school and city employment agency plans.

Built into the competition for resources was the idea that both school and employment systems be held accountable for setting numerical goals and either meeting them or adjusting their programs so that progress be achieved.

Meanwhile, in Boston, Mayor Kevin H. White, re-elected in 1979, devoted much of his inaugural address to the subject of improving the access of minorities to opportunity in the reviving city economy as the next frontier in race relations. One of his proposals was the graduates of high schools -- black and white -- be guaranteed access to jobs. White also appointed William S.

Edgerly, C.E.O. of the State Street Bank, to head the newly formed Boston Private Industry Council. Edgerly was a leader in the Committee for Economic Development's efforts to enlist business in the employment and training of the disadvantaged.

Edgerly drew to the board of the PIC the C.E.O.'s of the major bank and insurance companies in the city creating an organization that had the power to shape an agenda of collaboration between city government and the business community. With strong support from the Mayor and his employment and training agency, the Boston PIC has been able to establish a number of innovative and promising programs.

However, it was the arrival at the school department in the summer of 1981 of Robert R. Spillane, the first superintendent of the Boston Public Schools to come from outside the State in memory, that began the year-long series of discussions that led to the Compact. The PIC had already, in the summer of 1981, developed a successful summer job effort, with collaboration between businesses and their "partner" city high schools for recruitment of young people with decent attendance. And that fall, the PIC launched in three high schools a pilot version of the Careers Service with help from the Edna McConnell Clark foundation.

The Youth Act had envisioned a youth employment effort largely in the public sector. In Boston, since there were no Federal job creation dollars, the private sector would have to provide the jobs. The first interest of the business leaders, however, was in quality education and a quality work force. They were concerned that to a substantial extent the future of Boston depended on the improvement of the city's schools. And so the outlines of a possible deal became plain: the business community might be able to provide jobs in return for the school systems promise of measurable improvement. Out of prolonged discussions at PIC board meetings and in many other settings, the outlines of the Boston Compact emerged. From the beginning, concern about helping young people prepare for and attend college were part of the effort, and the universities played a major role in drafting the initial agreement which was signed in September of 1982.

Future Efforts

Many other cities have expressed interest in the Boston Compact model. Seven are part of a National Alliance of Business project attempting to construct their own versions of the effort. In each city the basic principles are the same. The Mayor, school superintendent and business leadership have agreed to establish base-line data and goals for measurable progress for students (the school's responsibility), for jobs (the responsibility of the private sector), and for staffing a school-to-work transition program.

A number of witnesses at today's hearing are testifying to the country's progress since the beginning of the poverty program over 20 years ago in developing techniques that are effective in helping disadvantaged young people make substantial educational progress. In describing to you some of the successes of the Boston Compact, I want to make a somewhat different point:

Organizing the labor market for young people who will begin their working lives immediately after their high school years can be done and it can make a substantial difference, assuring job opportunities for those who are prepared, whether through regular education or through our growing array of alternative programs. And in the effort to organize the job market for youth, private sector leaders are willing to play their part. Such an effort, however, needs to be made on behalf of all young people starting out in the job market, not just for those labelled, however briefly, "hard-core."

TABLE 1

School Enrollment and Labor Force Status of 1985 High School Graduates in the United States, October 1985

By Race and Hispanic Origin

	All 1985 Graduates	White	Black	Hispanic
All 1985 Graduates (000)	2,666	2,241	333	141
Unemployment Rate (%)	19.8	14.9	50.3	29.1
Employment/Population Ratio (%)	48.5	52.5	28.5	n.a.
Enrolled in College (000)	1,539	1,332	141	72
Percent of 1985 Graduates	57.7	59.4	42.3	51.1
Unemployment Rate (%)	13.2	11.0	n.a.	n.a.
Employment/Population Ratio (%)	38.5	41.4	n.a.	n.a.
Not Enrolled in College (000)	1,127	909	192	69
Percent of 1985 Graduates	42.3	40.6	57.7	48.9
Unemployment Rate (%)	24.6	18.1	55.1	n.a.
Employment/Population Ratio (%)	62.0	68.8	34.4	n.a.

n.a. not available. Data not shown where base is less than 75,000.

Note: Detail for the above groups will not add to totals because data for the "other races" group are not presented and Hispanics are included in both the white and the black population groups.

Source: Sharon R. Cohany, "What happened to the high school class of 1985?" *Monthly Labor Review*, October 1986, Table 1, p. 29.

TABLE 2

Boston Public High School Graduates, Class of 1985
Employment and School Status Compared to U.S. Graduates

	1985 Boston Graduates					Employment/Population Ratio		
			Percentage of Those Surveyed					
	Total	Surveyed October 1985	At School	School/Work	At Work	Boston Graduates October 1985	U.S. Graduates October 1985	Central Cities March 1986
Total	2,978	2,301	29	21	38	59	48	49
Black	1,437	1,125	25	19	41	60	28	34
White	913	721	29	21	41	62	52	62
Hispanic	323	239	30	22	32	54	43	40
Asian	283	207	51	34	13	47	n.a.	}32
Other	22	9	n.a.	n.a.	n.a.	n.a.	n.a.	

n.a. not available

Note: Comparisons of Boston and U.S. data for October 1985 are of limited usefulness because:
1) In the Boston Public Schools data the categories white, black and Hispanic do not overlap. In the October 1985 data for the United States, Hispanics are included in both the white and black population groups.

2) Boston data include those in the military (3 percent of the graduating class), while U.S. data are limited to the civilian noninstitutional labor force.

In U.S. data for March 1986 for 82 central cities the categories for whites, blacks, and Hispanics do not overlap.

Source: The Boston Private Industry Council, Inc., *The Class of 1985: A Follow-up Study*, November, 1985, Tables 1, 4 and 13. Sharon R. Cohany, "What happened to the high school class of 1985?" *Monthly Labor Review*, October 1986, Table 1, p. 29. Current Population Survey data for March 1986 as analyzed by Professor Andrew Sum, Center for Labor Market Studies, Northeastern University.

BOSTON COMPACT

Boston Demographics	Population	562,994
	White	70.0%
	Black	22.4%
	Other Minority	7.6%
School System '84-'85	Population	55,424
	White	27.4%
	Black	47.7%
	Asian	7.8%
	Hispanic	16.6%
	NA	0.5%
Organization	5 Districts: 4 Geographic Districts 1 District composed of Citywide Magnet Schools	
	Secondary Schools:	
	Exam Schools - 3 Magnet Schools - 5 District Schools - 9	

BOSTON COMPACT JOBS PROGRAMS

NUMBER OF BOSTON PUBLIC SCHOOL STUDENTS ENROLLED IN THE BOSTON SUMMER JOBS PROGRAM, 1982-1986

	Number Placed	Number of Companies	Average Wage Per Hour
1982	852	202	$ 3.86
1983	1,181	242	$ 4.00
1984	1,766	308	$ 4.14
1985	2,320	536	$ 4.55
1986	2,591	614	$ 4.94

Source: Boston Private Industry Council, 1987.

NUMBER OF BOSTON PUBLIC SCHOOL STUDENTS ENROLLED IN AFTER SCHOOL PART-TIME COMPACT JOBS PROGRAMS, 1982-86.

	Number Placed
1982	274
1983	504
1984	1,046
1985	1,106
1986	1,200

Source: Boston Private Industry Council, 1986.

NUMBER AND AVERAGE WAGE OF BOSTON PUBLIC SCHOOLGRADUATES HIRED FULL-TIME THROUGH THE COMPACT/ BOSTON PRIVATE INDUSTRY COUNCIL. 1983-86.

Class of 1983	415	$4.28
Class of 1984	607	$4.68
Class of 1985	823	$5.03
Class of 1986	967	$5.43

Source: Boston Private Industry Council, 1986.

COLLEGE AND UNIVERSITY ENROLLMENT PATTERNS OF BOSTON PUBLIC SCHOOL[1]

Enrollment

- 926 BPS graduates enrolled in the colleges in 1985.
- This was a 3% increase in BPS graduate enrollment from 1984.
- Among 11 private colleges BPS graduate enrollment declined 3.5% from 1984-1985.
- The percentage of non-whites in the cohorts has increased from 48% in 1984 to 65% in 1985.
- Blacks and Hispanics are enrolled at a lower rate than is their percentage of the BPS graduating classes.
- The percentage of black students increased in the public colleges but slightly decreased in the private colleges from 1984 to 1985.
- The feeder patterns between particular high schools and colleges have remained stable over the 3 years.

Retention

- In Cohort One (1983 freshmen) 81.6% enrolled in the spring of the first year, 58.6% enrolled in the spring of the second year, and 38.1 % enrolled in the spring of the third year.
- In Cohort Two (1984 freshmen) retention patterns are slightly higher with 88.8% enrolled in the spring of the first year and 61.4% enrolled in the spring of the second year.
- In Cohort Three (1985 freshmen) 83.0% enrolled in the spring of the first year, a lower rate than that of the previous year.
- Private colleges have slightly higher retention rates than public colleges.
- BPS exam school graduates have higher college retention rates than do non-exam school graduates.
- In each cohort financial aid has a strong association with retention at public colleges than at private colleges.
- Asian-Americans have the highest retention rates, whites the second, and blacks the third, with Hispanic rates unstable because of the small numbers enrolled.
- Financial aid is dramatically associated with black student retention; in the last two cohorts close to 90% of aided black students enrolled in the spring of the first year, compared to only 55% of black students without aid.

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[1] Langer, Peter. "Patterns of Enrollment: The College Enrollment and Retention of Boston Public School Graduates." The Fenway Retention Consortium, Simmons College, Boston, Mass., 1986. 16 Boston area colleges and universities ("colleges") provided data on graduates of Boston Public Schools ("BPS") who had enrolled as freshmen from 1983 to 1985. Retention refers to enrollment at the college of original entry.

BOSTON PUBLIC SCHOOL DROPOUT RATES

BOSTON PUBLIC SCHOOLS GRADUATING CLASS COHORTS
(CLASS OF 1982-CLASS OF 1985)
PERCENTAGE OF DROPOUTS BY GRADE (9-12)[1]

	9th Grade	10th Grade	11th Grade	12th Grade	Total
Class of 1982	6.8%	12.3%	10.6%	12.3%	36.2%
1983	7.1%	9.9%	14.0%	13.4%	38.0%
1984	6.2%	12.4%	15.9%	17.8%	40.7%
1985	7.0%	15.0%	21.1%[2]	18.3%	43.6%

Source: Boston Public Schools, Office of Research and Development, May 1985.

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[1] The Cohort analysis measures the high school dropout rate by following a class from the time the students enter the 9th grade through graduation, plus a 13th year (to include those not promoted at some point during high school), and calculates the dropout rate based on the activities of that particular class.

[2] Through April 24, 1986.

THE CUMULATIVE DROPOUT PERCENTAGE RATE BY RACE FOR BOSTON PUBLIC SCHOOLS' GRADUATING CLASSES 1982-1985

GRADUATING CLASS	TOTAL	BLACK	WHITE	ASIAN	HISPANIC
1985	43.0%	44.3%	42.1%	26.5%	51.9%
1984	40.7%	40.7%	39.7%	19.4%	48.2%
1983	38.0%	40.2%	36.4%	17.7%	41.0%
1982	36.2%	35.2%	37.1%	14.4%	42.6%

Source: Boston Public Schools, 1986

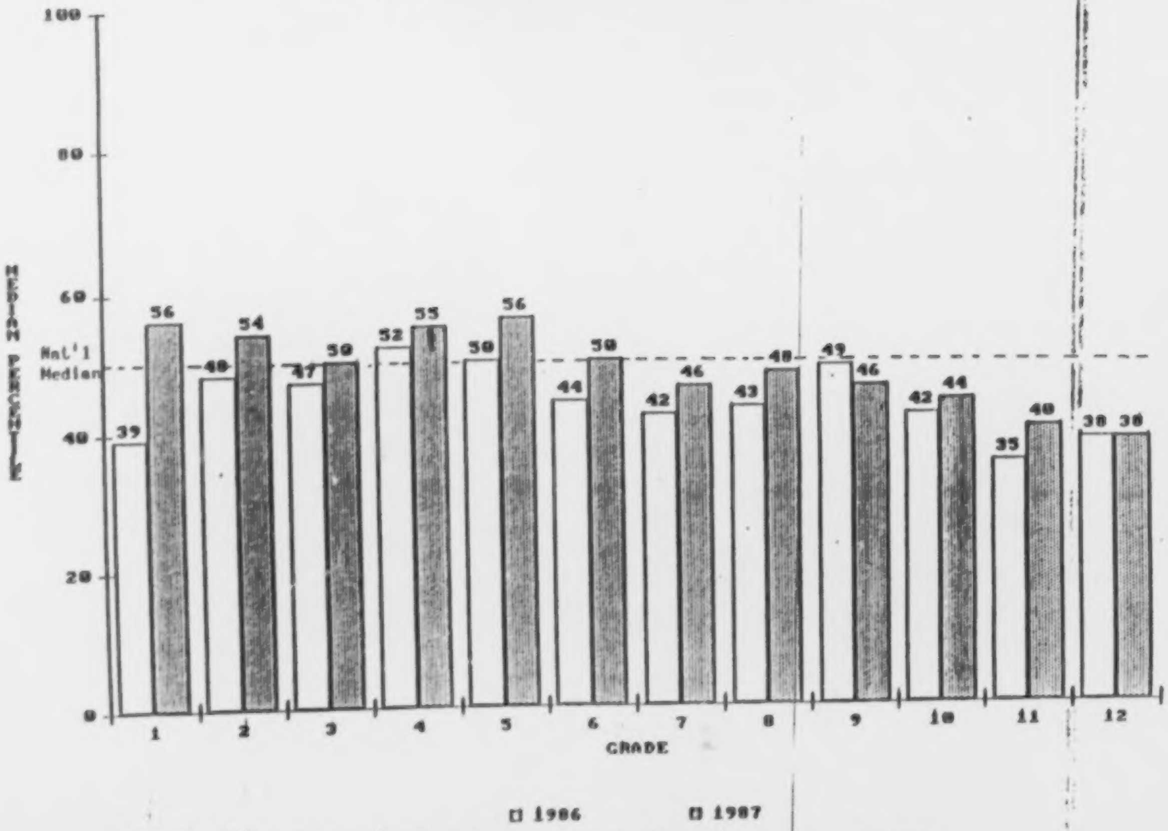
ACADEMIC ACHIEVEMENT

Exhibits 1 and 2 present the Metropolitan Achievement Reading and Math Scores of Boston Public School students, grades 7-12 for the years 1986 and 1987.

Exhibit 3 shows the 1987 Remediation needs in math and reading; The percentage of students scoring at or below the 40th percentile.

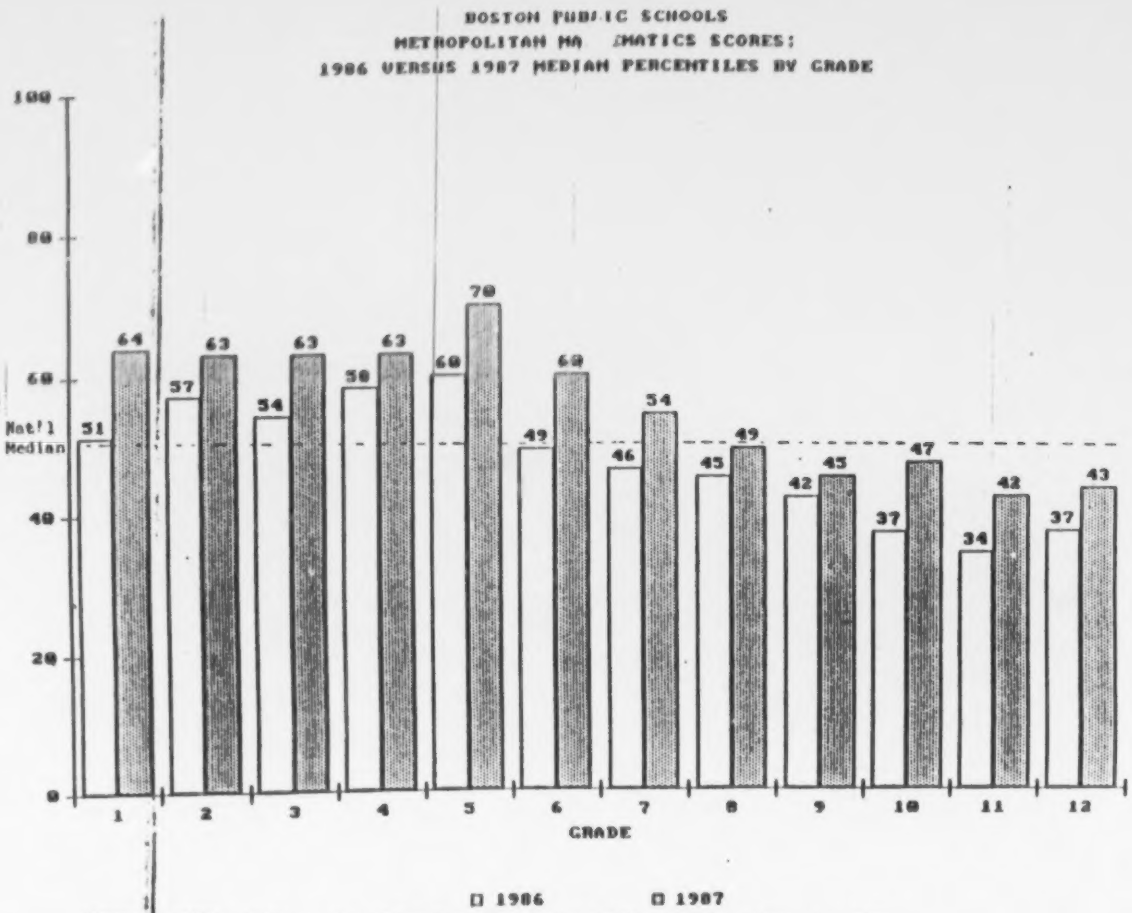
EXHIBIT 1

BOSTON PUBLIC SCHOOLS
METROPOLITAN READING SCORES:
1986 VERSUS 1987 MEDIAN PERCENTILES BY GRADE



Source: Office of Research and Development, Boston Public Schools, Mimeo, May 1987.

EXHIBIT 2



BOSTON PUBLIC SCHOOLS
METROPOLITAN MATHEMATICS SCORES:
1986 VERSUS 1987 MEDIAN PERCENTILES BY GRADE

Source: Office of Research and Development, Boston Public Schools, Mimeo, May 1987.

Representative SCHEUER. Mr. Spring, when you say access to structured jobs, what do you mean by that?

Mr. SPRING. If you are a white, young person whose parents lived in the D Street Project in south Boston, or a black from Orchard Park Housing Project, you are very unlikely to walk into the employment office at John Hancock, one of our largest employers, and ask for work.

That is a long, long step. And your parents cannot make that call for you. If my sister called me from Long Island and said, "Mike needs a job." And I said, "But I'm in Boston." And says, "He's out stealing hubcaps." A couple of hours on the phone, I will find someone I know in Suffolk County.

But, for inner-city kids, there's no one to do that. If you ask them, the questionnaire, as we did, "Who do you rely on to find your work?" They said, "I rely on the schools," except that few schools have anybody who is really prepared to do that.

In Boston, the private sector says "we will provide priority hiring for young people who have shown pretty good attendance in school." "Priority hiring" means this: if a company has entry-level jobs available, it will set some aside for Barton High School graduates, and not make kids from the school system compete against other applicants. who are often, in Boston, college graduates. But, the company will require them to meet basic entry level standards. The private sector also takes responsibility, through the Boston Private Industry Council, to build a bridge between school and work.

It is basically a school based job service, not more complicated than that. Unlike the federally funded, State based job service, however, the Career Service's in Boston reports directly, weekly, to the city's business leadership. The career specialist, or job coach, knows the young people in a high school well and knows the employing community face to face and is, therefore, able to say, "I would like you to take young Trachtenberg. I think he's going to make it in your firm."

And Trachtenberg can go and get—actually, what happens is, Steve, a guy like him, would take four or five interviews before he gets his act together. But, finally, when he can present himself clearly enough in an interview he will get a job.

So it is building a bridge between school and work an institutional structure. Americans are almost as allergic to bureaucracy as they are to taxes. In this case, in my judgment, in making the transition from school to work, person-to-person help is necessary. It cannot be done through microfiche. It really requires people who know the young people in the school, know the business community and can help them make that connection.

Representative SCHEUER. I don't understand. What is that institutional structure?

Mr. SPRING. In Boston, we call it the Career Service. It is a group of now 14 career specialists, one in each of our high schools, on the Private Industry Council payroll, working full time the year round.

Representative SCHEUER. They're on the payroll of a nonprofit organization?

Mr. SPRING. They are on the payroll of a collaborative organization. The Private Industry Council Board was put together by William S. Edgerly, CEO of the State Street Bank in Boston, in 1979. Gathered around him on the PIC board when it was established were 6 of anyone's list of the 10 most important businessmen in Boston. The board also includes the superintendant of schools and the executive directors of three of our most important community-based organizations, the presidents of a university and a community college. So it is a group of community leaders.

And in discussion over a year's time around that table, they hammered out how this Boston Compact might look. And it is that group which has a contract with the school system that pays roughly half the cost of the Careers Service. The 14 career specialists gather together once a week at PTC headquarters and go down the list of every student they are working with—those who graduated last year and got jobs, all of the people who are working part time, all of the people who work in the summer—go over those lists, set goals for themselves and measure progress, as any well-managed institution, public or private, would do.

The PIC board sets a citywide goal for each summer job program. Last summer the goal was 3,000 jobs."

And let me tell you, around that table, it gets to be late June and you haven't got to 3,000 jobs yet, there is a lot of pressure on companies and career specialists to find jobs. There's a lot of old-fashioned job development in smaller firms. Career specialists knock on doors, talk to employers about taking young people. The total reached last summer was 3,010. So the career specialist in that institution is critical to the success in Boston.

Representative SCHEUER. And that institution is this nonprofit group that is funded half by the school system and half by the corporations, with a lot of corporate leadership on it.

Mr. SPRING. Yes.

Representative SCHEUER. And they hire these counselors.

Mr. SPRING. It is closer to coaching. It isn't the same as the typical, school-based counselor. But, yes, they hire these career specialists.

Representative SCHEUER. What is the nexus between the school and the corporation? How does the kid get from the coaching to an actual job?

Mr. SPRING. First, I want to say that the career specialist is hired at a particular high school jointly by the PIC and by the headmaster, as we call high school principals in Boston.

This person is integrated into the high school program.

Representative SCHEUER. How is he integrated into the corporate program?

Mr. SPRING. In two ways. Among the larger firms, the chief executive officers on the PIC board call fellow CEO's and say: "The business community is trying to increase by 500 our total number of summer jobs this summer. And we think your fair share would be 15 or 16 more jobs."

The CEO's on the PIC board provide leadership among CEO's of larger firms.

In smaller firms, the career specialists actually do the job development. They call door to door as any job development officer person would do in an employment training system. But they call under the umbrella of a communitywide business effort.

And, finally, the Chamber of Commerce——

Representative Scheuer. Wait a minute. Let's slow down a bit. You get all of these corporate CEO's?

Mr. Spring. Yes.

Representative Scheuer. They communicate with each other over the summer, and try to bust some chops with other corporate leaders to produce jobs.

Mr. Spring. I'm not sure they use language like that among the CEO's but, yes, that is exactly right.

Representative Scheuer. All right. They use their persuasive powers.

Mr. Spring. They call and say: We would appreciate it if you would join us. Then they often get a response, that's true.

Representative Scheuer. There is job training and coaching to connect the kid with the job at a bank. He might not currently have the skills that are required by that job, the deportment, the dress—whatever.

Mr. Spring. There is—let me say two things about that. We tried in the early days of this program to get the private sector to be explicit about what they expected young people to know coming out of school. For a secretarial job, of course, an applicant must type, spell and know grammar. But for many entry-level jobs it turned out many firms don't have a detailed sense of exactly what young people need to know. As a practical matter, many firms use attendance as a guide.

They figure if the kid has 95 percent attendance, he's going to be able to make it.

Representative Scheuer. Attendance in school.

Mr. Spring. Attendance in school.

Representative Scheuer. Who provides the leadership?

Mr. Spring. It is a very important question. One point Steve was making earlier, which I think is really critical, is that colleges, especially community colleges, play a very large role in American life in providing education and training after secondary schools.

And Boston's larger firms normally, for entry-level workers, provide training and upgrading opportunities. And young people coming out of our high schools to these larger firms, take advantage of those opportunities.

Smaller firms, as Mr. McGraw pointed out, don't have this internal training capacity. And even in Boston, I think the connection between smaller firms and further training is far too weak.

The career specialist does teach academic subjects. The career specialist does work over time on young people's adaptation to the world of work. Learning to be punctual, to fit into a work setting is not fundamentally a cognitive problem. It isn't just knowledge. It requires experience and development.

Representative Scheuer. Behavior and attitude.

Mr. Spring. Exactly. Habits need to be developed. It is not that teachers have never told young people that while 85 percent attendance is okay at school, 100 percent is required at work. Students know that. But it is hard to do it. I don't know about you but I have habits I have a hard time breaking.

You need experience on the job. That is why the summer jobs are so important. It is only 10 weeks; anybody can make it for 10 weeks. Right?

And the work after school is important, integrated into the school day so that it does not take away from school. A couple of hours, two or three days a week, over many months can make a real difference. The kids learn to adapt to the world of work.

It is something middle-class kids do in the ordinary course of their lives. But, inner-city kids, isolated from productive economic opportunity, require structure to make it possible. Career specialists coach young people through the process, as you might coach somebody in basketball or football.

Representative SCHEUER. Just a moment.

Who provides the leadership for pasting all of this together? This didn't just grow like Topsy. Was it a progressive, thoughtful, dynamic Governor?

I don't want to politicize this hearing, please.

Mr. SPRING. Let me say that Governor Dukakis and the State have been extraordinarily supportive in this effort.

Representative SCHEUER. Who took the leadership?

Mr. SPRING. The leadership, I would say, comes from three sources. One is the Boston business community. Having been through a period of——

Representative SCHEUER. That is not a person.

Mr. SPRING. I understand that. The Boston business community, the group of leaders in the Boston business community, who had, looking out from their renewed prosperity, if I may put it that way, in the late seventies, early eighties, asked themselves——

Representative SCHEUER. It would be political if I asked who caused all of this renewed prosperity, so I won't ask that.

Mr. SPRING. There was a group of businessmen who, in the early eighties, began to look around and say:

"What do we need to sustain this prosperity?"

The answer they got, in part from a study done by the Joint Center for Urban Studies at Harvard-MIT, was that police, transportation, quality of schools really matter to Boston's future prosperity.

So there is a willingness on their part as a community to do something with the schools. The Boston schools had been in trouble from before the period of desegregation. And it was a de jure segregation. Change had to happen.

But, the actual desegregation process was extraordinarily chaotic. You had a school system in part run by the judge in the desegration case, and part run by the school committee, which had extraordinary powers, and part run by the superintendent, and part run by the State.

In 1981, Robert R. Spillane, who is now in Fairfax County, became superintendent of schools. He was willing to make substantial changes.

Meanwhile, William S. Edgerly had been appointed by Mayor Kevin M. White to be the founding chairman of the Boston Private Industry Council. I think those three individuals—Spillane, Edgerly and White—provided the leadership.

Mayor Kevin H. White, who in his inaugural address after reelection in 1979, committed the city to attempting to find a job for every high school graduate, and whose city training agency provided key leadership and unflagging support for the effort.

Edgerly, through his understanding that many businesses must participate if a major impact was to be made, his understanding that the chief executive officers must be committed to the effort and his leadership within the business community to develop that commitment. And, Spillane through his willingness to commit the school system to specific measurable goals for progress on attendance and achievement, and to push for planning at the school level to accomplish that progress.

Representative SCHEUER. Mr. Spring, you put something magic together in Boston. You really did. These figures really are very impressive. And maybe it is something that the Federal Government can duplicate more or less.

How do we extrapolate this experience to other cities across the country? What is the magic ingredient? Can the Federal Government act? What kind of a program do we devise to produce that kind of local leadership?

Mr. SPRING. Let me step back just a second. I think there is another factor, which is the background of ideas that led to the Boston Compact.

I think those ideas came from the Federal Government's 20-year experience trying to figure out how to do something serious for disadvantaged kids.

The Carter administration examined that experience through the Vice President's Task Force on Youth Employment and concluded that an alternative high school system paid for with Federal dollars would not happen; we had to do something in the high schools.

Representative SCHEUER. Do you believe that even for those kids who really feel that they have been short changed and given short shrift in the high schools, who have been turned off by the school environment, that there wouldn't be justification for having an alternative learning program?

Mr. SPRING. I don't mean that at all. Alternative programs are essential. What I mean is that what goes on in the high school itself has got to be improved so that fewer kids feel they must leave.

In Boston, 4,000 young people got part-time jobs if they were poor and if they would stay in school or go to alternative schools under the Youth Incentive Entitlement Pilot Projects (YIEPP) programs.

We found out, as you know, that once kids have left the high school classroom, they are reluctant to go back. So a large system alternative school was built in Boston under this Federal program.

Representative SCHEUER. And that took place at the work site?

Mr. SPRING. The education took place mostly in community-based organizations, alternative schools.

Representative SCHEUER. What kind?

Mr. SPRING. A great variety of them. Many of them just simply formed by people who wanted to provide alternative education, but they could be part of a settlement house or any other kind of community organization.

The point I'm trying to get at is that the Vice President's Task Force came to understand that what happens in the school, what happens in alternative education, what happens in private employment, what happens in publicly created jobs for young people has got to be looked at as that community's broad integrated response to the youth challenge. That the school, the city employment and training system, community groups and the private sector—have all got to work together.

Those are the principles we attempted to incorporate in the Youth Act of 1980, which passed the House but not the Senate. It was developed by Vice President Mondale's Task Force on Youth Employment, and in extensive consultation not only with the experts in the Departments of Education and Labor and the education and training leaders in Washington, but also in extended collaboration with city, school, business and youth serving agency leaders at the local level. That legislation might well provide a starting point for thinking again about the most promising Federal role in the education, training and employment of low-income youth.

A group of us, after we became a little experienced with unemployment ourselves after the Carter loss went back to Boston with these ideas in our minds. And there we found a responsive business community with Spillane's arrival, a responsive school superintendent and school committee, and a responsive city administration.

And so we worked very hard together, each sector, I think, recognizing that this is not something which any one sector can do alone; that we had to reach agreement over time. And with strong leadership, as I say, from each sector, we hammered out an agreement which has worked. There are now seven other cities in the country who are, with a little money from the administration through the National Alliance of Business, trying to build compacts of their own.

And in New York City, Mr. William Woodside of PriAmerica and Robert Wagner, Jr., of the school board are cochairs of the School and Business Alliance and are working on similar ideas.

So I think that there are a number of cities that are picking up on the idea.

What can the Federal Government do to help?

That is not easy, but I think that the elements——

Representative SCHEUER. What you have up in Boston is a very neat catalytic process whereby the business community, the schools, some really creative thinkers like yourself got together and accomplished a great deal.

What can the Federal Government do to promote that catalytic process in communities across the country?

Mr. SPRING. I think the elements I would say would be this: the private sector and the schools must agree to work together toward measurable goals, not just "to do better."

In education too often, performance numbers are basically political, developed by the school for the State or the Feds. They are not numbers that people working within the system use every day to measure how they are performing.

What I would say is, where the business and school communities will agree to lay down baseline data and to make commitments to measurably improve, however gradually, over time, the Federal Government ought to be willing to offer financial assistance for the school-to-work transition. It is not terribly expensive, but it is not for free.

And second, there ought to be funds available for remedial work. We know that kids who are way behind when they come to high school are going to require more than the usual class structure. As was provided in title II of the Youth Act of 1980, you want a situation in which the teachers who are going to be teaching in the remedial program, help design it.

Studies of education show that the reforms that last after the Federal money disappears are reforms teachers helped design.

Representative SCHEUER. Mr. Trachtenberg.

Mr. TRACHTENBERG. I just want to pick up on something Mr. Spring said by indicating that in my city, in Hartford, the corporate community is extraordinarily enlightened and anxious to try to address these kinds of problems. And in answer to your question about what the Federal Government could do, we have had some experiences in the last couple of years in which the corporate community and universities have identified jobs for high school students during the summer. In fact, the embarrassment was——

Representative SCHEUER. The Federal Government?

Mr. TRACHTENBERG. The local corporate community and the universities in Hartford have identified jobs in the summer for high school students. We ended up with more jobs than we had students who wanted to take the jobs. And I think, with the role of the Federal Government, what I was going to propose was to build, to put in, some money to have the kinds of advisers or counselors that Bill Spring is talking about to help to focus and to direct those students out of the schools and to make them less apprehensive about taking the jobs which they clearly have mixed feelings about. They see them both as an opportunity, but they are also threatened by them.

Representative SCHEUER. Why are they threatened by them?

Mr. TRACHTENBERG. They are not socialized into that kind of environment. It is the whole question that you were raising before about demeanor. It is a question of being able to show up on a regular basis. It is the fear of failure. It is the fear of being judged, of looking different, of seeming different, speaking different. And I think to some extent, also, it is an anxiety about their language and mathematical skills.

Mr. SPRING. They are just plain scared.

Representative SCHEUER. I had the experience, when summer jobs were made available, of trying to get minority kids to take advantage of that opportunity. They were fairly routine and sort of dead-end jobs that didn't offer a great career, but they were a start. And what I found out was that most of the jobs in my district—we had a lot of minority kids who needed jobs—went to white, middle-class kids, who wanted to make $1,000 or $1,500 or $2,000 over the summer for the VCR's, and whatever.

And these white, middle-class kids got the jobs because nobody else wanted them. The minority kids—I suppose for a lot of the reasons that you just suggested—didn't opt to take these jobs. Maybe they felt the jobs didn't give them dignity and didn't offer long-term career satisfaction. Most of those jobs didn't, but I felt terrible that those jobs didn't benefit some of these kids. These jobs might have given them a start in a business situation; teaching them to show up, putting the porkpie hat in the locker, to look and talk and function in an acceptable manner.

These jobs would have provided that, but they were not, for the most part, taken by the kids who needed them the most.

Mr. TRACHTENBERG. Seeing the potential in a job is also an acquired skill, we are not born with it, and we are not born part of this system. If there are no counselors and no peer advisers, who can tell you, "Look, this is an entry-level opportunity. Sure, it doesn't lead directly to a seat in the U.S. House of Representatives, but"——

Mr. SPRING. If you were at West Roxbury High School in Boston, there you would find Sam Berlow, the career specialist. He is in his office every day, with a telephone, a printout of every kid's record. He goes into the classes, and he talks to the students about job opportunities in Boston. He tells them that they will need good attendance and a couple of teachers to vouch for them, and then they can get a job. If a kid comes to him and is clearly not ready for a bank job, Berlow is able to start him out with a dishwashing or warehouse job, but with a clear promise that if he works out on this job, Berlow will take responsibility for getting him a better job. You don't believe it, look at Trachtenberg. Right? He started where you are; and now look where he is.

Young people coming from an environment where no one they know personally has made it in the larger economy, downtown jobs look very scary and unlikely. They have heard the rhetoric about opportunity and what America is all about for a long time. As the Kerner Commission warned us 20 years ago, that rhetoric sounds cynical to inner-city young people.

So you have to build a structure which shows them that working hard in school will pay off.

Representative SCHEUER. Mr. McMillan, and then I want to ask Mr. McGraw a question.

Mr. MCMILLAN. The Boston Compact and what is happening in the whole Northeast is, we think, a valuable model for use with school-aged kids, secondary education. But the Northeast has something unique that Beaumont, TX, Albuquerque, NM, Lincoln, NE, Butte or Billings, MT, and a number of cities in California that I can name, doesn't have, and that's jobs.

You have to have an expanding economy in that locality to be able to support that. That does not occur——

Representative SCHEUER. You are saying for the whole Rust Belt area, in other words, the old cities of the East Coast and the Midwest, forget it. It is just not going to happen if there aren't good jobs being developed.

Mr. MCMILLAN. If those jobs are not there, and their parents are laid off and have been on layoff for 2 years, it is very difficult to find jobs. I know we have been operating programs there and so have our affiliates for a number of years. It is very difficult to find jobs in those areas.

Representative SCHEUER. And offering a kid a job is the beginning of the end of it. If you can't do that, the rest is hogwash as far as the kid is concerned.

Mr. MCMILLAN. We think it is wonderful to be concerned about our kids and our nation, but we are not prepared to abandon their parents.

We think that the adults in this country need equal attention. The whole focus on the year 2000 is important, but those who have been unemployed for a number of years are concerned about the year 1987 and what help they can get.

Representative SCHEUER. Sure. Mr. McGraw, let me ask you a question. Take us up to the mountain top if you would. You had had extraordinarily successful experiences in mobilizing the business community to participate.

Can you think of any Federal program that could sort of grease the machinery and provide some incentive and stimulus to the process of corporate involvement in job training? How do we develop a program that would create these links between corporations and the schools, where there would be easy communication back and forth, corporate involvement and perhaps corporate inputs in some way into the vocational ed programs, so that young people who came out with the skills that corporations really needed, were made aware of the available jobs out there in the corporations?

Is there anything in our experience, or have your organizations developed anything?

Mr. MCGRAW. Continuing on the discussions we have been having, basically, in Boston, between business and the schools, rather than the workplace literacy——

Representative SCHEUER. I am very concerned about workplace literacy. For some kids, that is the last best hope.

Mr. MCGRAW. Boston, as you look at it, as a neighbor from New York, represents a very exciting project. Obviously, Boston had what I don't think we have right now in New York—credible leadership in the school system. The Boston business people were very concerned that they were getting far too many youngsters for entry-level jobs, out of high school in Boston, who couldn't even read at the eighth grade level, and so they were ripe for getting something done, but it wasn't until the superintendent and the school board met with a large group of Boston businesses and worked out something of a grid pro guo. The schools would see to it far more then they had that reading levels moved up in far more cases beyond the eighth grade and up toward 12th grade. And the business community would make available a sizable number of entry-level jobs for such graduates.

Representative SCHEUER. Can a kid who reads at the eighth grade level function in terms of the new jobs that are being created today?

Mr. MCGRAW. Not very well.

Representative SCHEUER. I wouldn't think so. Can a kid functioning at the eighth grade level, read a simple job instruction sheet?

[Nodding of heads.]

Mr. MCGRAW. Yes, but it has to be simple, Mr. Chairman, and you've got to—a lot of us are doing upgrading all the time on basic skills in these companies. We have got to do that.

We have done a lot of work between the schools and the businesses in New York, but it is mostly independent work. We have not worked with the school system overall. You cannot break through the bureaucracy sometimes in one city or another. Business people don't like to throw money down a hole into a lot of bureaucratic stuff that will not get the youngsters——

Representative **Scheuer**. Livingston Street is the curse of New York City. Lou Harris did a poll, and he asked a large sample across the country, "Would you agree to a 2 percent education tax on your earnings to help produce a country that was literate and productive?" And the answer was universally, "Yes, if we know something new is going to be added, and we are not just going to pour that 2 percent out of our income down the old sinkhole in education systems that are dysfunctional and don't work and don't produce learning and don't produce competence and don't produce literacy."

So people would be willing to pay through their taxes as citizens for additional spending and education, but not if it is just going to go into the same administrative morass that we have represented at 110 Livingston Street which does not produce learning at the other end of the pipeline.

Am I being unfair?

Mr. **McGraw**. I would love to see the Federal Government be able to help some of these school systems in some way by putting money into the development and training of remedial teachers and some of the counselors that Mr. Spring was talking about between business and the schools. But if we don't get something for that in terms of continuing on, it just falls apart.

Representative **Scheuer**. There wouldn't be any public support for such a program if it doesn't produce a visible, identifiable, provable advancement in learning.

Mr. **Trachtenberg**. Indeed, you might have a negative reaction, a backlash, because I think the people feel that they have focused more resources on the schools. The salaries for teachers are finally starting to move in an affirmative direction, and I think the rash of reports and criticism of these schools, indeed of the universities and colleges, have come to the attention even of university presidents, and therefore, people are more responsive. But, if we don't see an empirically demonstrable improvement, I think people will become cynical and turn their backs on the schools and shrug and walk away, and that would be a terrible tragedy for all of us.

Representative **Scheuer**. Mr. McMillan.

Mr. **McMillan**. Mr. Chairman, there is a lot of discussion about corporate leadership in providing opportunities for the youth. We think that is an important element since 1982, and the implementation of JTPA, where corporate America had 51 percent of all of the planning bodies within JTPA, it would be interesting to look at a survey and see how many jobs were created for either II-A or title III recipients that was provided by corporate America in their own councils.

Representative **Scheuer**. Well, this has been an extraordinarily thoughtful and stimulating panel. I apologize once again for the delay in getting underway, and I thank you for your testimony. We are going to hold the record open for 10 days or so, because we are going to have additional written questions for you. And with that, I thank you profoundly for your very thoughtful, stimulating testimony.

Thank you very much.

[The following questions and answers were subsequently supplied for the record:]

RESPONSE OF HAROLD W. McGRAW, JR., TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

McGraw-Hill, Inc.
1221 Avenue of the Americas
New York, New York 10020
Telephone 212/512-2025

Harold W. McGraw, Jr.
Chairman of the Board

December 8, 1987

Ms. Deborah Matz
Economist
Joint Economic Committee
Congress of the United States
1537 Longworth House Office Building
Washington, D.C. 20515

Dear Ms. Matz:

Here are the follow-up questions which were raised by Congressman Scheuer and forwarded to me in your letter of November 24th. I hope they will prove of use to the Committee.

With best regards,

Sincerely,

Harold W. McGraw, Jr.

HWM/ldb
Enclosures

1. ***What role should the Department of Education play in working with business to encourage training and coordination with the schools?***

   The word "schools" I take to mean educational providing organizations including ABE programs in schools. Working in cooperation with the Department of Labor, the National Alliance of Business, the American Society for Training and Development, state literacy planning groups, and others, both funding and technical assistance leadership is needed from DOE. Among the many areas of need are: to get information out to small businesses on the educational programs and services available in their communities to help meet the basic skills needs of their employees; to provide training to for-profit and nonprofit educational and human resource development organizations at the state and local levels in workplace program and curriculum development procedures; to assist state planning groups in their efforts to involve business as partners in the planning and development of basic skills services; to engage in activities that encourage businesses to "adopt a literacy program," in the same vein as businesses now adopt a school; to develop and provide information to the business community on sources of federal ABE funding for which they are eligible; to systematically disseminate information to businesses on model job-related basic skills programs.

2. *Should the U.S. government in some way encourage corporate training?*

   Technical and management training, into which corporations already invest billions of dollars a year, would not be an appropriate focus for the U.S. government, but provision of basic skills services for needy employees and prospective employees would. If funding levels for current adult basic education programs, particularly ABE, can be increased, business groups should be among the eligible groups. Some JTPA funds might be earmarked specifically for such activities, perhaps requiring partnership between businesses and educational organizations. Tax incentives might be considered as a form of direct encouragement.

3. *Have any programs been successful at teaching trainees or students to think as well as to read, write, and count?*

   Critical-thinking skills are higher-level abilities such as problem solving, applying known information to new situations, making sound judgments, and reasoning. Like the basic skills of reading, writing, and math, these skills are best enhanced in the process of teaching to a specific content area or learner goal. Learning goals should be typical job or everyday life problems that learners directly encounter. The best process usually involves learners as active participants in program and curriculum design, and sometimes in program management. The goal is to enable trainees to learn how to "do" something useful on the job or in everyday life pursuits: seek out information;

write that information down in a useful form; discuss and analyze information with friends, family, and co-workers; produce a plan to accomplish a specific task or to solve a problem, give oral and written instructions and reports.

Some programs that build critical thinking skills into basic skills instruction are: those developed by Tom Sticht for the U.S. military, the Polaroid Corporation, the joint project of Ford Motor Company, United Auto Workers, and Eastern Michigan University; The Door (a Manhattan center which provides job-readiness, remedial education, health, and other services to at-risk youth); Union Settlement House in East Harlem (job-readiness, remedial education, health, and other services for the primarily-Hispanic population); City University of New York's remedial "English 001" course at the Staten Island campus; The University of Pennsylvania's Literacy Research Center; the Lutheran Settlement House Women's Program in Philadelphia; The American Reading Council; Push Literacy Action in D.C.; Literacy Volunteers of New York City; the New York Public Library's Centers for Reading and Writing; and Project:LEARN in Cleveland.

4. *How do we find the so-called hardcore unemployed and motivate them to accept training?*

These persons are most likely to be "found" in unemployment lines, public assistance programs such as welfare, prison, and hanging out on street corners. Training programs linked directly to social service and correctional agencies would be one promising approach. Where appropriate, eligibility for benefits could be conditional upon enrolling in training /basic skills programs if such skills are found to be needed on the basis of assessment. Community-based organizations have an especially good record in reaching out to residents of their communities and training programs set up in cooperation with CBOs might be one way to reach the street people. Some of the efforts might be set up in cooperation with businesses who are willing to provide subsequent employment, or with chambers of commerce or private industry councils. Note that persons at the lowest skills levels will need long-term instructional help before qualifying for jobs, and that efforts to help will need to be sensitive to that and to the motivational problems of these adult learners. Many of these learners would need the caring relationship of one-to-one tutoring in the early stages of instruction/training. The voluntary organizations and CBOs would be equipped to provide that with adequate funding support. An effort should be made to identify programs (such as that of the Safer Foundation in Chicago and that of District Attorney Morola's office in the Bronx) which work effectively for "at-risk" people, to disseminate information on those that work well or appear to be promising, and to provide funding to strengthen and replicate those that warrant it. Note: There is a need to better understand the extent to which jobs would in fact be available to the hard-core unemployed if trained, and what kind of jobs. (Researchers caution regularly that if all Americans were made literate today, there would still be unemployment because of profound changes occuring in the marketplace itself. The nature of the job, if that is the ultimate goal of training, should shape the content and approach of instruction.)

RESPONSE OF STEPHEN JOEL TRACHTENBERG TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

UNIVERSITY OF HARTFORD

West Hartford, CT 06117
The President
203-243-4417

December 4, 1987

Ms. Deborah Matz
Joint Economic Committee
Congress of the United States
Washington, D.C. 20510

Dear Deborah:

Thank you for your letter of November 24th. Here are my responses to your questions:

What do you see as the role of the Department of Education in working with business to encourage training and coordination with schools?

Let me begin by stating the goal: a nationwide, carefully structured and respectable effort to provide feedback mechanisms between the worlds of business and education. These mechanisms must be lean and cost-effective if they are to receive the approval of Congress and the Executive. The ultimate purpose of such an effort is to assist the economy of the United States, and the productivity of its workers and managers, in a highly competitive international marketplace.

In order to achieve a feedback system of this kind, the Department of Education would have to take the following steps:

1. It would have to re-program itself ideologically by modifying the adversary tone it has cultivated in recent years in its relations with universities, colleges and public school systems. Most if not all states, and most if not all private and public schools, were engaged in the struggle to raise standards before this particular political "line" was even launched. It can be credited, however, with having added some fuel to the fire already lit. Today, this adversary posture has begun to look very stale and basically pointless. The time has come to move beyond it.

2. The Department would have to establish a serious working relationship with the other cabinet-level departments directly involved with business and labor. Such a relationship would have to move beyond the usual platitudes about cooperation if we are talking about the kind of feedback system envisioned above.

3. Working in tandem with those other cabinet-level departments, the Department of Education would proceed to establish, at key regional points around the nation, a total of about a dozen coordinating councils. Their mandate would be (a) to work with existing councils and authorities in business and education (including PICs, accreditation bodies, state legislatures, chambers of commerce, and industry associations) in order to see to it that schools know what business needs while businesses understand, and are given the opportunity to influence, what schools are teaching; and (b) to create, wherever appropriate, the mechanisms needed to accomplish these goals.

   The obvious challenge in such an arrangement is to see to it that coordinating councils of this kind are not perceived as "one more bureaucratic boondoggle," and are generally acknowledged to be performing the functions for which they were created. In my opinion, everything depends on the character and quality of those selected to head them and organize their activities. These need to be individuals combining good academic and business backgrounds who share the conviction that what they are doing will significantly affect the competitive capabilities of the United States of America.

   People like that will not necessarily be attracted by high salaries and fancy offices. They will not be attracted at all by a Department of Education that maintains a narrow and punitive vision of its responsibilities.

We have heard about the training programs provided in other countries, most notably Singapore, France, West Germany and Japan. In all of these countries the national government provides, or in some way encourages, corporate training. Do you think this is an appropriate role for the U.S. government?

The answer, in my firm opinion, is yes and no. The coordinating councils envisioned above would certainly represent an effort by the U.S. government to encourage corporate training. Significantly, though, it would incorporate a degree of voluntarism that, in a European or East Asian country, might well seem inadvisable.

The national values of the United States have been shaped by circumstances that have a few parallels in the other industrialized nations of the world. This country is less export-dependent than they tend to be, much more productive where food is concerned, and much more split up into regions, states and conurbations that are often, by world standards, "nations unto themselves." That is why federally centralized efforts, except in case of war, tend not to work too well in this country. Wherever possible, therefore, the work of the federal government needs to be attuned to our unique traditions of voluntary as opposed to mandatory striving.

We have been told that in order for employees to be successful in the workplace, they must not only have basic skills but they must be capable of thinking -- higher order learning. Do you know of any programs that have been successful at teaching trainees or students to think -- not just to be able to read, write and count?

I would like to answer that question by looking at the separate constituencies involved.

1. Public elementary and high school students

The efforts of American public schools to encourage active, creative thinking are carried out in the face of some serious challenges not shared to the same degree by the other industrialized nations. These challenges include the ethnic heterogeneity of the American population, the tradition that really smart people teach in colleges rather than elementary or secondary schools, and the massive size of many of our public school systems, which in turn leads to bureaucratization and an over-emphasis on paperwork as opposed to classroom excitement.

Consequently, too many American public school students come to regard their classroom experience as a chore rather than a "mind-stretcher." This tendency is further encouraged by the unimaginative or actually misleading quality of textbooks designed to placate potential adult critics rather than communicate the excitement of learning.

In short, public school students can be taught the joys of thinking and learning only by teachers and school administrators who themselves find it a joy to think and learn -- while also, of course, maintaining the "basics" where study habits and fundamental mastery are concerned. What that implies is that America's public school teachers need help in closing the gap that presently separates them from the teachers who work in colleges and universities and who are generally regarded as more secure in their knowledge, more willing to encourage student individuality, and more tolerant of the notion that truth is always up for discussion.

2. College and university students

Among those who actually teach in American colleges and universities, an attitude prevails that could be summed up in the following statement:

"The kids come here out of these finky-dink high schools that don't know what real thinking is all about. Let's grab them in the first part of the freshman year and deliver some intellectual shocks that finally get them out of their mixture of complacency, ignorance, and TV-type thinking. Most of them can't tell you whether Caesar lived before or after Charlemagne!"

Without necessarily endorsing that attitude, we can see that it has its roots in the profound gap between high-school-level and college-level teaching that makes college, for most freshmen, a completely different kind of an experience. The exceptions would be students from America's wealthiest suburban municipalities, whose school systems consciously strive to emulate the standards that prevail in higher education.

When teachers are dedicated to shaking up established categories of thinking, and to opening rather than shutting intellectual doors, their students are encouraged to learn how to think and reason in ways that will be of help to them down to and into their retirement years. A broad popular recognition of that fact helps to explain why so many American families send their kids to college -- they see that a college education truly makes a difference, even if they rationalize their decision by pointing to the higher income levels that usually follow when reasoning skills are fully developed.

In other words, contrary to the political "line" espoused in recent years by the U.S. Department of Education, our college and university students probably represent the constituency that is best served by our nation's educational arrangements, even if specific improvements are very much needed.

3. "On-line" workers

At the present time, Fortune 500 corporations as well as medium-sized businesses are becoming increasingly anxious about a labor shortage that is already critical in certain parts of the country, including my own State of Connecticut, and is approaching the critical point in other areas. For the first time, they are having to deal with the notion that their economic future will be determined by their ability or inability to meet the sheer need for "warm bodies" to perform essential work-tasks.

On an individual basis, therefore, these companies are creating programs intended to develop the skills of existing employees, especially those in secretarial and middle-level administrative slots. A second purpose of these new skills-development programs is to encourage employee retention by giving the worker a sense that he or she is "going somewhere" within the company. In general, these programs aim to broaden the employee's ability to reason while also enhancing specific abilities in data processing or other areas.

Many of these programs suffer from ambiguities and uncertainties that may clear themselves up with a few years of experience. Sometimes the desire to make the employee feel good predominates over the need to give him or her truly marketable skills. This may be due to a short-sighted fear which says that a truly competent employee requires more inducements not to quit than one who is merely dragging along.

Quite often, individual companies will turn to universities or private agencies in order to mount efforts of this kind. That leads, typically, to a workshop or series of workshops lasting from one day to several weeks or several months. The risk there is obviously one of "bits and pieces," especially if the company switches from one provider to another in search of something better or cheaper.

In short, this area of "teaching trainees to think" is in the process of growing and developing. The successes, so far, have been local, individual, and time-limited.

5. Managers

Every American business school is engaged in the training of managers. These include undergraduates and graduate students who can be put in the category of future managers as well as those already in the work world who are seeking to acquire their MBAs through part-time study or to enhance specific skills through non-credit continuing education.

This major academic industry has both successes and failures to its credit. It is certainly providing the numbers of managers needed by American business at a time when many experienced middle-managers are being terminated. A growing number of complaints are being heard, however, about the capacity of these newly-graduated managers to reason, learn and communicate. Business schools are trying to re-tool their curricula accordingly, but are being hampered in doing so by the deadly war being fought between business schools "accredited" by the American Assembly of Collegiate Schools of Business (AACSB) and those that have not received, or do not want, AACSB "accreditation."

As noted in my earlier testimony, AACSB standards often cut against the established training needs of American business. Since those standards are increasingly influential in the world of business education, we can say that managerial training within the academic world is a weak-point in the struggle to make ourselves more competitive within the global economy.

Meanwhile, the ability of large and medium-sized companies to make effective use of inside or outside trainers in order to enhance the skills of managers varies greatly from corporation to corporation. Complete successes seem to be infrequent -- but that is true of life in general.

It is difficult enough trying to retrain dislocated workers, but at least we know who these people are, and they are frequently anxious to be retrained as they are used to working. How do we find the so-called hard-core unemployed and motivate them to accept training?

My answer to this question, though not fashionable, is one in which I believe. We begin by reaching not the hard-core unemployed but, at as young an age as possible, the children of the hard-core unemployed. We supply, with their parent's or parents' consent, the supplementary services they need in order to understand the workings of the larger society in which they will have to earn their livings -- which is the kind of understanding that gets transmitted over the dinner table in upper-income families. In order to gain their parents' participation, such a program has to be accepted and valued by the parents themselves, and has to be seen as serving their own needs. Supplying the needed inducements -- sweeteners, if you will -- is only possible within the context of a serious, long-term, dedicated national effort that has some money to spend in a careful and wisely applied manner. That, in turn, implies that we must move beyond the thinking that has tended to prevail among the educated members of our society in recent years, summed up by the bumper sticker that reads: "Poverty sucks."

I hope these replies will be of help to the Committee, Deborah. Please give Congressman Scheuer my warm personal regards, as well as those of my wife, Francine.

Sincerely,

Stephen Joel Trachtenberg

Stephen Joel Trachtenberg
President

SJT/hdi

RESPONSE OF MICHAEL G. McMILLAN TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

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Executive Director
Michael G. McMillan

December 15, 1987

The Honorable James H. Scheuer
Chairman
Subcommittee on Education and Health
Joint Economic Committee
Dirkson Senate Office Building
Room G01
Washington, D. C. 20510

Dear Congressman Scheuer:

On November 19 at the request of the Subcommittee, I provided testimony at your hearing on "Competitiveness and the Quality of the American Workforce." At that time, you asked me some specific questions regarding unemployment in the auto industry and the level of service provided by negotiated training agreements in that industry. I promised to provide answers to your questions after conferring with the United Auto Workers to obtain the best available statistics.

Enclosed is my response to your questions for inclusion in the record of the November 19 hearing. As indicated in these figures, the negotiated agreements have been successful in reaching a high proportion of laid-off auto workers who are in need of retraining assistance.

Also enclosed is a paper responding to four questions addressed to me in a November 24 letter from your staff. We trust that these comments will be useful as the committee examines the complex retraining needs of this nation's workforce.

Sincerely yours,

Michael G. McMillan
Executive Director

MGM/jab
opeiu#2, afl-cio

cc: Alan Kistler
Rudy Oswald
Robert McGlotten
Art Shy

RESPONSE TO QUESTIONS FROM THE JOINT ECONOMIC COMMITTEE SUBCOMMITTEE ON EDUCATION AND HEALTH

Prepared by
Michael G. McMillan, Executive Director
AFL-CIO Human Resources Development Institute
December 9, 1987

Question 1: What do you see as the role of the Department of Education in working with business to encourage training and coordination with schools?

The role of the Department of Education, in our view, should be proactive. Let me suggest, however, that the Department of Education should not limit its role simply to the business community of the private sector; rather, it should encourage the involvement of industry . . . both business and labor.

We would also add a cautionary note concerning the role of industry with the Department of Education. The Department of Education should be extremely careful that the education system, itself, does not become dependent on the private sector for its general wellbeing. Although there certainly can be no argument that the Department of Education should actively seek industry's input into its system, and that the needs of industry should be one of the factors when schools at the local level develop their curriculum and design their program, the education system should not be designed exclusively around industry's needs.

Education should be broadly based and sufficient flexibility should be incorporated into the system so that those who complete the curriculum are well educated -- being able to function as an adult citizen of this country, as well as an employable worker.

The Department of Education should have regular meetings established with representatives of major employers and unions to determine their rapidly changing skill and education needs. A strategy should be developed so that schools can provide state-of-the-art teaching materials, curriculum and equipment to our schools.

Employers will only be brought into education when they understand that the educational community offers them the best opportunity to remain competitive in a world market. A primary responsibility of the Department of Education, in our view, should be to make business fully aware that an investment in the educational system is an investment in the future of their industry, as well as their country's future.

Question 2: We have heard about the training programs provided in other countries, most notably, Singapore, France, West Germany and Japan. In all of these countries the national government provides, or in some way encourages, corporate training. Do you think this is an appropriate role for the U.S. government?

Certainly we agree that the national government should encourage corporate training. But the meaning of the word "encourages" needs to be defined a little more clearly. We do not believe that such encouragement should take the form of tax incentives to corporations that provide training. Instead, the government, i.e., the Department of Education, must learn to market to businesses the inherent value to the private sector of training.

Business in this nation is profit-driven. Therefore, the most effective way for the Department of Education to encourage corporate training is to awaken the corporate community to the ways in which corporate training will result in increased profits.

What motivates corporations in a socialistic country is often substantially different than what motivates them in a capitalistic nation such as ours. Such differences in motivation should be carefully kept in mind when viewing any other nation's corporate training programs. Cultural differences also must be considered.

For example, it is widely recognized by those who have studied American-based corporations that one of their distinguishing characteristics is that they typically want to see immediate (one to five years) profit from their endeavors. By contrast, foreign-based corporations, such as those from Japan, are managed on the basis of considerably longer term development, planning and investment goals (within six to twenty years). This has been accounted for in numerous ways, including cultural differences, the relationship between government and the private sector, patriotic considerations, etc.

What is important is that as our government "encourages" corporate training, the campaign must be designed to encourage this training with the needs of American-based corporations and workers in mind, rather than those that are based in Japan, West Germany, Singapore or France.

Question 3: We have been told that in order for employees to be successful in the workplace, they must not only have basic skills but they must be capable of thinking -- higher order learning. Do you know of any programs that have been successful at teaching trainees or students to think -- not just to be able to read, write and count?

We are frankly baffled by the phrasing of this question. We trust that the Subcommittee members have no doubts that the American worker is "capable of thinking." We assume the question is intended to address cognitive skills such as logic, reasoning, decision making, and problem solving, and whether a greater emphasis should be placed on these subjects in our schools and training programs.

Our answer is an unqualified yes. It is true that in many European nations, courses in logic, reasoning, etc., are taught at every grade level. For the most part, we would agree that it would be appropriate to increase that curriculum throughout our educational system. Educators in this country have done extensive research over the last thirty years on this very subject. The American Federation of Teachers is concentrating on special programs to develop critical thinking skills. We would expect that experienced educators would have much to offer the Subcommittee in this area.

One of the major examples of how logical thought processes can be introduced into the public education system was the so-called "new math" that was piloted in this country in the early sixties. This system involved the development of a logical thought process for math, rather than relying on the "formula" learning system. We are sure the Subcommittee is aware of many hundreds of different types of curricula aimed at the thinking process that school districts across the country have undertaken.

For persons who are out of school, the apprenticeship system is perhaps the model for taking workers beyond the "basics." Apprenticeship, by combining classroom training with on-the-job training, offers an opportunity for the development of these "higher order" abilities. Apprenticeship training is necessarily fairly long-term. Training is not customized to a specific employer but is designed to develop in workers a broad-based understanding of their trade so they can function in changing work environments. Apprenticeship training enables workers to acquire decision-making and problem-solving skills -- not simply to function as cogs in the system.

This teaching of cognitive skills in the educational/training system can draw on what we have learned from the apprenticeship model, in that it must be fairly long term, flexible and broad-based. Unfortunately, the recent trend in education/training programs in this country is just the opposite: toward specialized skills training. Frankly, we do not see a willingness on the part of the national administration nor private sector employers to make the substantial investment that would be necessary to broaden the availability of cognitive skills training.

Question 4: It is difficult enough trying to retrain dislocated workers but at least we know who these people are and they are frequently anxious to be retrained as they are used to working. How do we find the so-called hardcore unemployed and motivate them to accept training?

We are somewhat surprised by both the assumptions and implied conclusions of this question, which seem to accept a rather simplified view of the condition of our country's unemployed.

First of all, not all dislocated workers are "found" nor is training provided to a significant segment of those who need and want such training. Many actually become "hardcore" unemployed, going two, three or more years without work. Secondly, your question implies that the hardcore unemployed are difficult to find because they are not anxious to be retrained since they are not "used to working." The facts simply do not substantiate that conclusion. Less than ten percent of the hardcore unemployed can or will be served by the Job Training Partnership Act programs due to the limited funds available under that program. Of that ten percent, the majority will be those who are the most job ready. In other words, the hardcore are not difficult to find. The problem is that the incentive in the current employment and training system is to serve the easiest to place. This must be corrected through legislation.

To reach the hardcore unemployed, we would urge the following changes in the employment and training system:

(a) Sufficient funds must be made available to work with the hardcore unemployed and provide quality training programs for them.

(b) Performance standards for the Job Training Partnership Act should be reviewed to provide incentives for working with the hardcore, rather than encourage a system that rewards working with the most job ready.

(c) The education, employment and training systems must work together to provide quality programs, ensuring that every participant obtains the necessary skills to function in today's society, including the basic skills of math, reading and writing as well as the cognitive skills discussed earlier.

(d) Income maintenance must be offered during training so workers can afford to invest their time in meaningful longer term training.

(e) Training must be in occupations for which there is a demand so that the person completing the training will be able to find employment.

(f) Jobs that are developed by the system must be in occupations and with employers that pay a livable wage and provide at least the minimal fringe benefit of health insurance.

In the Human Resource Development Institute's nineteen years of working with the hardcore, as well as dislocated workers, we have administered, designed, operated and/or provided technical assistance to hundreds of employment, training and educational programs. We have not found it difficult to attract the unemployed to employment and training programs that provide good, quality training and that lead to good jobs; in fact the opposite is true. The necessary financial resources are simply not available to provide that opportunity to all the unemployed who need and want assistance.

INFORMATION TO BE ADDED TO THE HEARING RECORD ON THE IMPACT OF NEGOTIATED TRAINING PROGRAMS ON DISLOCATED AUTO WORKERS

Submitted to the Joint Economic Committee
by Michael G. McMillan, Executive Director,
AFL-CIO Human Resources Development Institute
December 9, 1987

During my November 19 testimony before the Joint Economic Committee on "Competitiveness and the Quality of the American Workforce," I was asked to explain the extent to which unemployed auto workers have been served by training programs established by labor-management agreements. I understand that these questions were prompted by criticisms raised in earlier testimony by Badi Foster, president of the Aetna Institute Corporate Education Center.

T. J. Pasco and K. K. Dickinson of the UAW-Ford National Development and Training Center have responded separately to the remarks by Dr. Foster in their letter of December 3. A copy of their letter has been transmitted to Congressman Scheuer.

I would like to provide additional information for the hearing record to answer the questions that Congressman Scheuer raised during my testimony.

Congressman Scheuer asked me to explain why it appeared that only 15% to 20% of dislocated auto workers have participated in training programs established by the funds negotiated by the UAW with Ford, GM, and Chrysler. In fact the percentage of workers served through these programs is closer to 45% of the industry's dislocated workforce. The UAW estimates that of the 350,000 UAW members who have lost jobs since 1982, between 150,000 and 160,000 have participated in these programs. As I noted in my testimony, 45,000 former Ford workers have been served through the Ford-UAW program alone.

Even the figure of 45%, however, understates the true impact of UAW joint programs on covered workers. Many of the 350,000 dislocated UAW members were not covered by the national collective bargaining agreements that supported training, e.g., because they worked for employers other than the "big three" U.S. auto makers.

Of the non-covered workers, many have had access to training opportunities provided under the Job Training Partnership Act and the Trade Act. Because the UAW has collective bargaining agreements with over 2,600 employers, it is difficult to estimate the number of workers in the industry who have not been eligible for training provided through the joint training funds but who have been trained through other channels.

An additional 25,000 to 30,000 workers chose early retirement rather than training through the UAW joint programs, according to the best estimates of the UAW.

Therefore, we estimate that the number of covered, non-retiring workers who received benefits from the negotiated programs is actually close to 75%. This 75% figure would be consistent with the 70% participation rate found by Gary Hansen of Utah State University in his study of the UAW-Ford program in San Jose, Calif. Dr. Hansen concluded that the workers' 70% participation rate was "higher than the data presented in most existing studies." He also noted that the 25% participation rate in the adult basic education component of that program is "singularly unique -- even phenomenal."

The ability of the UAW-Ford programs to reach and serve dislocated workers effectively -- in fact, more effectively than programs without union and company involvement -- is consistent with the findings of the General Accounting Office in its comprehensive study of dislocated worker programs published in April of this year. The GAO reported that "projects operated by employers and/or unions had above average results about three times more often than projects operated by other organizations, such as service delivery areas."

RESPONSE OF WILLIAM SPRING TO ADDTIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

January 28, 1988

Memorandum for Deborah Matz
Joint Economic Committee

From William Spring

Subject Follow-up Questions

On November 24, you sent me a letter asking five questions following on my testimony of November 19. Here are my attempts at answering them.

(1) What do you see as the role of D.O.E. in working with business ...(and) schools?

For Marc Tucker I am now trying to write a paper anwering that question at some length. My starting point is the Youth Act of 1980 with some modification. In brief I would advocate the following: Federal dollars for in-school and alternative school site remediation - or better - high quality basic education for young adults - and federal dollars for the costs of a careers service where local communities are willing to make the commitments such as:

- matching money (so it is not just Uncle's program
- accurate measurement of baseline situation and progress both in learning and in job success organized in such a way as to help in the management rather than simply the after-the-fact evaluation of programs.
- collaboration in designing the community wide program between school, business, community organizations and government.
- an in-school education design that is in the hands of the teachers who must carry-out the reading and math programs.

The Youth Act sent federal dollars to the city level through the Chapter I formula, but required competition among eligible high schools for three years of program money, and required that teachers design the program and set their own evaluation criteria. The Private Industry Council would have had not only responsiblity for working on a jobs piece (with the Mayor) but reviewing theWe hool plans setting criteria and rank ordering them before the Superintendent made the final selection.

We now know a lot more about how to organize entry level jobs in the private sector. In 1980, after the disappointing experience of trying to bribe private firms to hire low-income kids through subsidies, we thought that the jobs for kids in school would likely be public sector. It would be wise to require local business communities to make job commitments as part of any federally supported education and training effort for young adults.

Am less confident about how to promote quality learning among young people who have left school without confident mastering of basic reading, math and thinking skills. Some way must be found to integrate youth jobs with continued education, in the plant, or at a community college. It is not wise to spend so much ($4,000 per student per year?) on those getting in to college and to neclect the majority of young people who do not even begin further education and whose learning deficits so heavily impact their own lives and the nation's.

(2) Corporate training: is the experience of central government encouragement in France, West Germany, etc. appropriate for the U.S. Government?

Yes, of course. Through tax deductibility of training, as a business expense, and through Pell Grants and student loans for those in community colleges and proprietary schools, not to mention the Voc Ed, JTPA, Welfare and Joint Apprenticeship system, the federal government is already involved, but in an unco-ordinated, and , I think, often ineffective way. The various elements in the system see themselves as competitive rather than complimentary, and the system in bewildering chaos to individuals and small firms seeking training opportunities. I hope to cover this issue in my paper for Marc, but, quickly, I would recommend the following:

o a common language - based on occupational codes - to keep track of training across all providers at the labor market and state level. Now education (voc. ed and commo. colleges) and J.T.P.A. keep skill records in different codes. And no one can say how many secretaries were trained in Boston last year, or for how long, with what mastering, with what collaboration with employers and with what success in placement. A common data base would allow us to compare training sites across delivery systems and give workers, employers and government funders some clear idea of what they are getting for their money.

o To draw smaller businesses and those working in smaller businesses into the employment and training effort the government should help in the forming of training consortiums - as the Bay State Skills Corporation has done on a small scale in Massachusetts - which can share the cost, and the design and teaching - a training programs with teaching institutions.

o A new method of combining beginning employment - youth jobs - with continued learning on the job site or conveniently organized needs to be thought through, as well as, o A method for paying for the training. I think that an Individual Training Account is a poor idea. Only relatively well off workers could afford to set the money aside (see the IRA experience) and smaller businesses would be reluctant to put money into fund not triggered until the business goes under. And tax credits leave open many questions about quality. So I do not have an answer, but one needs to be worked out. Perhaps a revolving loan fund, payable to training programs, in company and out that meet industry standards and collected from the rising incomes of those who benefit from the training economically through federal tax returns.

(3) Do I know of programs successful at teaching high order thinking skills.

No.

(4) How motivate "hard core" unemployed people to accept training?

In 1941, before the beginning of World War II, the Employment Service counsellors thought that many of those who had never reconnected in a stable way to the job market since the 1932 crash were "unemployable". Then came the war and full employment at relatively high wages and most of the unemployable were transformed. If a man perceives that a short term, low-wage job - to little money to support a three member family even - is all he can hope for from the job market he is likely to adjust to a different life style. But if genuine, perceivable opportunity is there it is my judgement people will respond. The key element is integrating training and work opportunity at decent wages. Not easy to do.

(5a)) Why is the Black employment/population ratio better for Blacks than Hispanics in Boston (B-60;H-54) while the reverse is true for the nation (B-28;H-43).

o Don't know. Hispanic leaders ask. Note that Hispanic totals are up 11 points in Boston over the national figures. The most extraordinary thing is the terrible low rate of Black graduate employment nationally. But you ask a good question and I don't have an answer.

(5b) What accounts for the success in Boston in employing Black youth?

o Not sure. My speculation is that Black youth are most likely to be isolated from the employing community by lack of personal contact or knowledge and strength of negative stereotype on both sides. The Career Specialists build a bridge between student and employer and once the bridge is there these able young people considered one-by-one convince employers they are worth hiring and them perform creditable on the job. Absent the Career Service and the Private Sector commitment to hiring, Black youth are trapped in their isolation.

If there is anyway I can be of help as you think through your committee report I would be glad to lend a hand. Thank you for the opportunity to testify.

AFTERNOON SESSION

Representative **Scheuer**. We will now ask the second panel to take their places. You were all introduced before 10 o'clock.

Joan Wills, director of the Center for Policy Research at the National Governors' Association, and again our thanks to her for her marvelous work with helping us conceive and mount this fine set of hearings. We are very grateful to you, Ms. Wills.

James Kadamus, assistant commissioner for occupational and continuing education in the New York State Department of Education.

Lori Strumpf, presently project developer for the Center for Remediation Design.

Judith Gueron, president of the Manpower Demonstration Research Corp.

And Dale Parnell, president and chief executive officer of the American Association of Community and Junior Colleges. Before that he was president of San Joaquin Delta College and first chancellor of the San Diego Community College System. Prior to that he was Oregon's superintendent of public instruction.

So we really have a splendid panel, and we have about an hour. So we will go into the 5-minute rule, and then I am sure we will have some questions.

All of your complete, prepared statements will be printed in full in the record.

Please proceed, Ms. Wills.

STATEMENT OF JOAN L. WILLS, DIRECTOR, CENTER FOR POLICY RESEARCH, NATIONAL GOVERNORS' ASSOCIATION

Ms. **Wills**. Thank you, Mr. Chairman. From a person who helped design a new careers program back in 1965, I think it was, and still implementing the ideas of new career programs—we are getting ready to publish a major report showing States they can use the idea of new careers in terms of helping to improve the education system—thanks.

You have given me a tough task here today, and that is to summarize fairly quickly what it is I think that we have learned from other countries and to give you very specific suggestions about what the Federal Government can do.

I think it is important to recognize that sometimes the values are important, and that is why we can learn from our friends in Japan. In that country it is effort, not inate ability that is considered the most important attribute for people to succeed, and that is infused in their entire education system.

The parents are deeply involved in their children's education. They also have a high regard for teachers, and they pay them well.

These are three critical ingredients that I would suggest that if we had inculcated as values in our society that we wouldn't be going through some of the exercise we are having to go through in terms of restructuring our educational enterprise.

When one looks to Europe, one finds that, in fact, they are much more organized and systematic than we are in terms of how they link their worker-adjustment programs and their safety net programs together so that they in fact have a more rational system.

They also spend considerably more money, essentially on prevention. They invest more in terms of education, and they in fact——

Representative **Scheuer**. They invest more in what?

Ms. **Wills**. In education.

Representative **Scheuer**. Would you pull your mike closer?

Ms. **Wills**. Yes.

And they have a higher quality educational system in most of those countries.

Representative **Scheuer**. France?

Ms. **Wills**. Most European countries. Germany is held up as essentially the best model.

For those people who fall through the safety nets in Europe, what we find is their compensatory programs do two things that I think are important lessons for us. They call them add-on schemes, but they simply say that individuals need to participate for at least 2 years.

Let me give you a dramatic contrast. The JTPA program, the average period of time we are dealing with the at-risk population—the average length of time participants are in a JTPA program is 16 weeks.

Europe also has another important lesson for us. They have very heavy reliance on systems that are controlled by employers and the unions, with participation by the government.

The problem is that we don't have in our country the same percentage of the American labor force belonging to unions. That is one piece of the equation. But we also lack on the private sector side, business organizational membership structures of employers, so that we don't have the kind of organized mechanisms available to, in fact, create and utilize public/private mechanisms. We have to design essentially our own. It is a fundamental difference.

I was asked to talk about what it is our Federal Government can do.

One, we have to solve the deficit crisis and the trade problem, and that is a very important part of this activity. Only you at the Federal Government can take care of those two problems.

Past that, though, the Federal Government can, in fact, do much less in one arena. What we have and what I have heard you ask in many ways, hearing some frustrations, is how can we organize the different Federal grant programs?

The problem is they are incredibly complex at this point. Laws unfortunately are written and resources are allocated with micromanagement detail written into them, administrative arrangements are mandated, State and local government systems are ignored, and a selective class of service providers are too often protected in Federal legislation.

The result is not particularly surprising. There are no clear lines of accountability. Process drives the system, and we, in fact, do not have good identifiable expectations or standards for any of those systems out there.

I think we need to talk much more about outcome criteria driven programs and the Federal Government setting standards in terms of expectations of what it is we want to happen to the people.

Representative **Scheuer**. Including standards?

Ms. **Wills**. Yes, absolutely.

It would also be nice if we got the money out to the system in a more quick fashion. I think it is important for us to realize that while we are here in Washington, DC, and we are used to continuing resolutions as a way of life, we need to recognize we will have problems as a result. We do not have well-managed, well-conceived, carefully executed programs at the local level as a result of this kind of uncertainty.

I see the red light is on, so I am going to very quickly run through specific program strategies.

Representative SCHEUER. Take another minute.

Ms. WILLS. Thank you.

First of all, we need to be careful about what we mean by the hard core because those people do have spells of employment quite often unless they are incarcerated or heavy into drug abuse, but they are participating and do want to participate in the work force.

For us to have, I think, a coherent strategy we need to have a prevention first approach. Prevention first suggests that we redefine and expand such programs as the Head Start Program.

We now have 26 States who are funding programs for 3 and 4 year olds for the at-risk. It seems to me that we need to take a hard look at the fine program that has been in existence a long time and see what kinds of Federal constraints are in fact preventing the Head Start Program and the State financed programs to work together more efficiently.

The prevention first strategy——

Representative SCHEUER. Let me ask you a question there.

We didn't start the Head Start Program as something that would be a permanent Federal program. This was an experimental program.

Ms. WILLS. I remember that.

Representative SCHEUER. And we thought that if this neat little experimental program worked for poor people as it has worked for middle-income and wealthy kids for almost a century, that the States would get the idea.

Ms. WILLS. They did 20 years later.

Representative SCHEUER. Everybody has been telling me that local people know best. Now, if local people know best, why didn't local communities pick up on the quintessential genius of the Head Start Program, which is another name for enriched day care or nursery school.

I went to a Head Start Program 60-odd years ago. We didn't call it that. We called it nursery school or prekindergarten.

But why haven't the States and the cities of our country picked up the idea that this is good for poor kids just as it has been proven and time tested and wonderful for middle-income kids over a period of a century? Why haven't they just extended the public school system down for that 2 years to the third year of life and, better yet, the second year of life?

We never conceived that it would be a permanent federally financed program. We just assumed that if it worked the cities and the States would get the message and do it.

Ms. WILLS. That is a long question. I will try to be quick.

First of all, within the last 5 years we have seen States finance for local communities programs for 3 and 4 year olds for the at-risk population that was based on that. Finally, research was listened to and we found out that it did make a difference.

To ask the local communities based on severe property tax limitations in their school systems to pick up the additional burden for financing that program is not realistic.

That then translates other levels of government, and in this case it is State and the Federal Government that are infusing the additional dollars needed for those communities that don't have the tax resource base.

Representative SCHEUER. Are you telling me then that local people know best but they don't care very much? Is that the message.

Ms. WILLS. I don't think that is fair. I think that is mixing the questions of how one finances programs with how one manages and runs programs.

There has been a considerable expansion in this country for establishing kindergarten, which is now either mandated or voluntarily used throughout the country. There has been a turf fight between service providers as it relates to programs for 3- and 4-year olds, the advocacy for full day care programs versus the advocacy types concerned about child development programs. That program has to be resolved.

I can tell you some more stories about how the States finally negotiated between the day care advocacy groups and the educators to in fact expand these 3- and 4-year-old programs.

I am not proud to say that——

Representative SCHEUER. The Federal Government contributes about 6 or 7 percent of the total education budget, and I don't think that the States would like to see us move in and begin to take a dominant role.

Ms. WILLS. I didn't suggest that you should. Quite the contrary.

Representative SCHEUER. I am being a devil's advocate. They can't have it both ways. If they want control of education to be local, then they should finance education.

Ms. WILLS. They are. The increase in growth—that is another piece of testimony—but the increase in growth of what the States are putting into the education is the largest single growth area in terms of State budgets. There are not many States financing over 50 percent of the education, K through 12 system plus the postsecondary system. They are now nationwide financing 37 percent of education, and they are in fact in this last 8 to 9 years, as education reform became front and center, have consistently year after year—not as much as perhaps the teachers would have liked to have increased the teachers' salary, but they have been increasing that investment in education.

Now, part of that is also because there is not the support for the local property tax to continue to finance it, but they are doing it. The question is how much do we need from the Federal Government as it relates to targeted programs for the at-risk.

We do need that kind of equalization formula support, particularly for those areas that cannot afford these extra dollar programs for the more difficult populations they serve. It is not an either/or situation.

Representative SCHEUER. It is not a simplistic situation. Of course it isn't, and I don't want you to think that I am badgering you.

Ms. WILLS. Oh, no, not at all.

Representative SCHEUER. I am playing devil's advocate.

Do you think the teachers of the country in return for significant increases of pay would begin to accept some standards of accountability, some standards of pay based on specific measurements of outputs?

Ms. WILLS. They don't have a choice.

Representative SCHEUER. Elaborate on that briefly.

Ms. WILLS. We are tracking—Governor Clinton mentioned to you when he was here that my center is responsible for tracking what is going on in the States for the next 5 years and reporting what is happening in terms of States and education reform.

Whatever the version is, every State has basically thrown out the quid pro quo that they will only increase support for education if in fact we have some outcomes that measure achievement and progress of students. Lots of mistakes have been made in these last few years trying to define what those outcomes need to be, and some of them have been related to tests, but it is very clear that legislators, Governors, and in part pushed, quite appropriately, by the private sector, have said we will put in more money as long as we know we are going to get something for it.

That is the responsibility—it has been decided by the Supreme Court that the States have that constitutional responsibility. They are dealing with it.

I anticipate that we will be seeing, within the next 2 to 3 years even, much more rewards, kinds of incentive programs going to local districts and to teachers when in fact they accept their responsibilities to see that students are learning. We are well down that path.

Representative SCHEUER. That may be the most encouraging piece of testimony we have had all day.

I thank you very much, Ms. Wills.

[The prepared statement of Ms. Wills follows:]

PREPARED STATEMENT OF JOAN L. WILLS

MR. CHAIRMAN, FIRST LET ME ADD MY VOICE TO THOSE WHO HAVE ALREADY CONGRATULATED YOU FOR HOLDING THIS SET OF HEARINGS ON ONE OF OUR NATION'S MOST IMPORTANT TOPICS. PRIOR TO PREPARING THIS TESTIMONY, I RECEIVED THE WRITTEN MATERIALS OF THE PREVIOUS WITNESSES AND WAS DEEPLY IMPRESSED WITH THE QUALITY, RANGE, AND THOUGHTFULNESS OF THEIR WORK. WE PLAN, THROUGH THE NATIONAL GOVERNORS' ASSOCIATION CENTER FOR POLICY RESEARCH, TO USE MUCH OF IT IN OUR OWN WORK.

YOU HAVE ALREADY HEARD FROM MANY OF MY OWN BOSSES, BOTH CURRENT AND FORMER--THE GOVERNORS. FROM THEIR TESTIMONY, YOU ARE AWARE THAT STATE GOVERNMENTS ARE AGGRESSIVELY PURSUING MULTIPLE STRATEGIES TO IMPROVE THE QUALITY OF OUR EDUCATION AND TRAINING INFRASTRUCTURE. EVIDENCE ABOUNDS IN VIRTUALLY EVERY STATE: EDUCATION AND TRAINING ARE CONSIDERED WISE INVESTMENTS OF PUBLIC TAX DOLLARS. GOVERNORS ARE WORKING WITH EDUCATORS, PARENTS, BUSINESS, AND LABOR REPRESENTATIVES TO CREATE NEW STANDARDS OF EXCELLENCE, NEW MARKET-DRIVEN MECHANISMS TO DELIVER RELEVANT SERVICES, AND NEW PREVENTION AND SECOND CHANCE PROGRAMS FOR THE AT-RISK POPULATIONS. GOVERNORS ARE KEENLY AWARE, HOWEVER, THAT THEIR FEDERAL PARTNER IS IMPORTANT IF WE ARE TO BE SUCCESSFUL IN PREPARING PRODUCTIVE PEOPLE THROUGH PRODUCTIVE, RATIONAL POLICIES. RATIONAL FEDERAL POLICIES AND FISCAL SUPPORT ARE ESSENTIAL, PARTICULARLY FOR TARGETED SERVICES FOR AT-RISK POPULATIONS.

I HAVE BEEN ASKED TO FOCUS ON LESSONS FROM OTHER COUNTRIES, AND TO SUGGEST SPECIFIC ACTIONS THE FEDERAL GOVERNMENT CAN TAKE TO IMPROVE THE CHANCES OF SUCCESS FOR OUR AT-RISK POPULATIONS.

LESSONS FROM OTHER COUNTRIES

THE JAPANESE OFFER PERHAPS THE MOST IMPORTANT LESSON; IT IS A LESSON OF VALUES, NOT PROGRAMS. THEIR NATIONAL VALUE SYSTEM ASSUMES THAT PERSONAL EFFORT IS AN IMPORTANT ATTRIBUTE TO SUCCESS IN SCHOOL; PARENTS ARE DEEPLY INVOLVED AND SUPPORTIVE OF THEIR CHILDREN'S EDUCATION. THEY ALSO HAVE HIGH REGARD FOR TEACHERS, WHO ARE WELL PAID. THESE VALUES, IF INCULCATED INTO OUR SOCIETY, ARGUABLY COULD HAVE PREVENTED MUCH OF THE NEED OUR NATION FACES TODAY TO REPAIR OUR EDUCATION ENTERPRISE.

WHEN WE LOOK TO OUR WESTERN EUROPEAN ALLIES FOR MODELS TO HELP AT-RISK POPULATIONS, WE FIND THEY HAVE BEEN MORE WILLING TO EXPERIMENT WITH THE WORKER ADJUSTMENT/INCOME SUPPORT FUNDS (UNEMPLOYMENT INSURANCE) THAN WE HAVE. FIRST, IT IS IMPORTANT TO NOTE THAT IN MOST OF THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD) COUNTRIES, THE WORKER ADJUSTMENT FUND IS CREATED THROUGH A TAX PAID BY THE EMPLOYEES AS WELL AS THE EMPLOYER. THESE FUNDS HAVE BEEN USED TO RETRAIN EMPLOYEES OF THE CURRENT WORKFORCE, AS WELL AS THE UNEMPLOYED. HERE IN OUR COUNTRY, THIS PRACTICE IS DISCOURAGED IN MANY WAYS; FOR EXAMPLE, FEDERAL LEGISLATION EXPRESSLY PROHIBITS THE USE OF STATE UNEMPLOYMENT COMPENSATION FUNDS FOR ANYTHING OTHER THAN THE PAYMENT OF BENEFITS. IN CONTRAST, SOME COUNTRIES IN EUROPE RECEIVE INCREASED INCOME SUPPORT IF THE INDIVIDUAL IS IN TRAINING.

IN GENERAL, IT IS FAIR TO OBSERVE THAT EUROPEAN COUNTRIES TEND TO INVEST MORE IN PREVENTION (I.E., THE EDUCATION SYSTEM, INCLUDING A HIGHER QUALITY VOCATIONAL EDUCATION SYSTEM). BECAUSE OF THIS INVESTMENT IN PREVENTION

SERVICES, PLUS A MORE COHERENT SET OF LINKAGES THAT COORDINATE ELIGIBILITY BETWEEN SAFETY NET PROGRAMS, SUCH AS UNEMPLOYMENT INSURANCE AND WELFARE, IT IS MUCH LESS LIKELY THAT INDIVIDUALS WILL FALL THROUGH THE SAFETY NET.

IN COMPENSATORY PROGRAMS, THERE IS A HEAVIER INVESTMENT OF TIME AND DOLLARS PER INDIVIDUAL. FOR EXAMPLE, VARIOUS JOB PREPARATION PROGRAMS (OR, AS THEY SAY, ADD-ON SCHEMES) OFTEN LAST TWO YEARS OR EVEN MORE. THIS COMPARES TO OUR JTPA PARTICIPATION PERIOD, WHICH AVERAGES SIXTEEN WEEKS.

THERE IS HEAVY RELIANCE ON MECHANISMS THAT ARE CONTROLLED BY EMPLOYERS AND UNIONS TO DEFINE OUTCOMES FOR TRAINING. THESE SAME MECHANISMS ARE RESPONSIBLE FOR MAKING SURE THE SYSTEM WORKS. THESE MECHANISMS, OFTEN CALLED LABOR BOARDS, HAVE DEFINED RESPONSIBILITIES AT THE FEDERAL, STATE, AND REGIONAL LABOR MARKET AREAS. IT IS NOT POSSIBLE IN OUR COUNTRY TO EMULATE THESE MECHANISMS, PRIMARILY BECAUSE A MUCH SMALLER PERCENTAGE OF THE AMERICAN LABOR FORCE BELONGS TO UNIONS, AND WE LACK THE ORGANIZATIONAL MEMBERSHIP STRUCTURES THEY HAVE FOR EMPLOYERS. ANY SYSTEM WE DESIGN FOR OUR COUNTRY HAS TO RECOGNIZE SUCH FUNDAMENTAL DIFFERENCES.

REGARDING SECOND CHANCE PROGRAMS, PARTICULARLY FOR AT-RISK YOUTH OR "DISCONNECTED" YOUTH, IT IS OUR SENSE THAT WE ARE VIEWED AS THE LEADERS OF THE INDUSTRIALIZED COUNTRIES IN OUR WILLINGNESS TO EXPERIMENT WITH VARIOUS INTERVENTION STRATEGIES. HOWEVER, MORE THAN ONE FOREIGN OBSERVER AND SEVERAL OECD ANALYSTS HAVE BEEN DISMAYED BY OUR TENDENCY TO FUND SUCH INITIATIVES IN THE ON AND OFF PATTERN THAT HAS UNFORTUNATELY CHARACTERIZED MOST FEDERAL INITIATIVES IN THE LAST FIFTEEN YEARS OR SO.

DR. SIGNITION FORDHAM'S TESTIMONY FOR THESE HEARINGS ELOQUENTLY POINTED OUT THAT FOR MANY AT-RISK INDIVIDUALS IN OUR COUNTRY, WE NEED TO DEVISE STRATEGIES THAT ACCOMMODATE THE CULTURAL, HISTORICAL, IMMIGRATION, AND SOCIETAL REALITIES THAT ARE UNIQUE TO THIS COUNTRY. WE HAVE TO FIND OUR OWN SOLUTIONS AND, IN MANY INSTANCES, WE ARE. OUR CHALLENGE IS, IN PART, TO SPREAD THE KNOWLEDGE GAINED IN THOSE ISOLATED SETTINGS AND INFUSE THESE "BEST PRACTICES" INTO MAINSTREAM SOLUTIONS. THIS NEED LEADS INTO THE SECOND PART OF MY TESTIMONY.

WHAT SPECIFICALLY CAN THE FEDERAL GOVERNMENT DO TO HELP ELIMINATE THE BARRIERS TO PRODUCTIVITY FOR AT-RISK POPULATIONS? THE SIMPLE ANSWER IS MUCH LESS -- AND MUCH MORE.

HOW SHOULD THE FEDERAL GOVERNMENT DO MUCH LESS? OUR CURRENT INTERGOVERNMENTAL GRANT-IN-AID SYSTEM IS INCREDIBLY COMPLEX. LAWS ARE WRITTEN AND RESOURCES ALLOCATED WITH MICRO-MANAGEMENT DETAILS PROSCRIBED, ADMINISTRATIVE ARRANGEMENTS MANDATED, STATE AND LOCAL GOVERNANCE SYSTEMS IGNORED, AND SELECT CLASSES OF SERVICE PROVIDERS PROTECTED. THE RESULT SHOULD NOT BE SURPRISING. THERE IS A LACK OF CLEAR LINES OF ACCOUNTABILITY, LINES THAT FIT INTO OUR FEDERALIST SYSTEM OF GOVERNMENT. PROCESS DRIVES THE SYSTEM, NOT CLEARLY IDENTIFIABLE STANDARDS AND OUTCOME CRITERIA. PROGRAMS ARE NOT DESIGNED TO PROVIDE A FULL RANGE OF NEEDED SERVICES. INDIVIDUALS IN NEED OF SUPPORT OFTEN HAVE TO BE REFERRED TO ANOTHER AGENCY, AND ALL TOO OFTEN THERE IS NO GUARANTEE SERVICES WILL BE AVAILABLE.

AS PHIL POWERS OBSERVED IN HIS TESTIMONY, PUBLICLY FUNDED PROGRAMS ALL TOO OFTEN ARE NOT "USER FRIENDLY." EVEN FINDING AVAILABLE INFORMATION ABOUT A SERVICE IS NOT EASY. A PORTION OF THE BLAME, THOUGH NOT ALL OF IT, CERTAINLY MUST BE BORNE BY CONGRESSIONALLY DESIGNED CATEGORICAL PROGRAMS THAT CONTAIN THE AFOREMENTIONED CHARACTERISTICS.

STATES ALSO NEED GREATER CERTAINTY ABOUT HOW MUCH MONEY THEY WILL RECEIVE FROM THE FEDERAL GOVERNMENT AND WHEN THEY WILL RECEIVE IT. STATE AND LOCAL OFFICIALS ARE PLAGUED CONSTANTLY WITH UNCERTAINTY CAUSED BY CONGRESS' FAILURE TO ENACT A BUDGET, WHICH FORCES THE FEDERAL GOVERNMENT TO OPERATE WITH SHORT-TERM CONTINUING RESOLUTIONS. SCHOOLS OFTEN DON'T KNOW AT THE BEGINNING OF THE SCHOOL YEAR IF THEY WILL HAVE FUNDS FOR SUPPLEMENTAL PROGRAMS; WELFARE AGENCIES CANNOT CONTRACT WITH COMMUNITY-BASED ORGANIZATIONS TO PROVIDE SERVICES TO WELFARE MOTHERS IN JOB SEARCH PROGRAMS. OUR NATION CANNOT BUILD AND SUPPORT AN INFRASTRUCTURE OF WELL-MANAGED, WELL-CONCEIVED, AND CAREFULLY EXECUTED PROGRAMS IN SUCH AN ENVIRONMENT. THE FEDERAL EXECUTIVE AND LEGISLATIVE BRANCHES ARE THE ONLY ONES EMPOWERED TO STOP SUCH PRACTICES AND THEY DESPERATELY NEED TO DO SO.

AND HOW CAN THE FEDERAL GOVERNMENT DO MUCH MORE? NOT ALL THAT FOLLOWS TRANSLATES INTO MORE MONEY. ALTHOUGH SOME SUGGESTIONS MAY REQUIRE MORE MONEY, MOST CAN BE ACCOMMODATED THROUGH MORE STRATEGIC USE OF CURRENT RESOURCES. HOWEVER, ALL THAT FOLLOWS IS PREDICATED ON THE IMPERATIVE THAT THE FEDERAL GOVERNMENT'S FIRST PRIORITY MUST BE TO REDUCE BOTH THE FEDERAL DEFICIT AND OUR TRADE BALANCE. IF THAT IS NOT DONE, THEN ALL OF OUR CHILDREN WILL BE AT RISK DUE TO OUR FOLLY, NOT THEIRS.

FIRST, IT SHOULD BE NOTED THAT THIS TESTIMONY IS BASED IN LARGE MEASURE ON THE WORK OF THE GOVERNORS, THEIR STATE OFFICIALS, AND THE RESEARCH COMMUNITY THAT HELPED SHAPE THE RECOMMENDATIONS IN TIME FOR RESULTS BRINGING DOWN THE BARRIERS, AND JOBS, GROWTH, AND COMPETITIVENESS. THESE REPORTS WERE SENT TO YOUR OFFICE AS YOU BEGAN TO DEVELOP THESE HEARINGS. ADDITIONALLY, THE NGA CENTER FOR POLICY RESEARCH IS ACTIVELY INVOLVED IN PROVIDING TECHNICAL ASSISTANCE TO STATES THAT ARE INTERESTED IN IMPLEMENTING THE CARNEGIE TASK FORCE REPORT ON THE NATION PREPARED. WE ALSO PROVIDE A WIDE RANGE OF SUPPORT SERVICES TO THE STATES IN THE EMPLOYMENT AND TRAINING ARENA. ALSO, THE CENTER IS RESPONSIBLE FOR PRODUCING THE REPORT CARD ON EDUCATION REFORM MENTIONED BY GOVERNOR CLINTON IN HIS TESTIMONY. GOVERNORS ALLOWING SUCH A REPORT TO BE PRODUCED WOULD HAVE BEEN UNTHINKABLE TWENTY YEARS AGO. MUCH HAS CHANGED IN THE STATES AND THIS COMMITMENT TO REPORT BOTH SUCCESS AND FAILURE IS BUT ONE SMALL EXAMPLE OF THE CHANGE.

THE SPECIFIC ACTIONS THE FEDERAL GOVERNMENT CAN UNDERTAKE WILL BE DISCUSSED IN TWO WAYS: FIRST, THE SPECIFIC PROGRAM STRATEGIES, AND THEN CRITICAL AND UNIQUE RESPONSIBILITIES OF THE FEDERAL GOVERNMENT IN RESEARCH, DEMONSTRATION, EVALUATION, INFORMATION COLLECTION, AND DISSEMINATION.

SPECIFIC PROGRAM STRATEGIES

IT WOULD BE WRONG TO START ANY DISCUSSION ABOUT WHAT THE FEDERAL GOVERNMENT CAN DO TO RETRAIN, OR MORE APPROPRIATELY STATED, TRAIN THE HARD-CORE UNEMPLOYED WITHOUT FIRST MENTIONING THE NECESSITY TO CONSIDER THIS NEED AS A PART OF A CONTINUUM.

THIS CONTINUUM SHOULD BE VIEWED FROM A PREVENTION-FIRST STRATEGY. A PREVENTION-FIRST STRATEGY SUGGESTS STRONGLY THAT A RESTRUCTURED HEAD START PROGRAM WOULD BE A SOUND INVESTMENT THAT TIES THOSE RESOURCES TO THE EXPANDED CHILD DEVELOPMENT PROGRAMS FINANCED NOW IN TWENTY-SIX STATES FOR AT-RISK THREE- AND FOUR-YEAR-OLDS. PRIMARILY DUE TO FEDERAL CONSTRAINTS ON THE HEAD START PROGRAM, THIS IS NOT NOW THE CASE.

A PREVENTION-FIRST STRATEGY BUILDS ON WHAT WE HAVE LEARNED THROUGH PROGRAMS FINANCED BY CHAPTER I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT. THIS EXPERIENCE INDICATES THAT TIGHTER TARGETING IS APPROPRIATE AND SCHOOLS SHOULD BE THE FOCUS, NOT JUST THE INDIVIDUAL CHILD. ADDITIONALLY, IF FUNDS ARE TO BE MADE AVAILABLE FOR DROP-OUT PREVENTION, THEN IT IS A WISE INVESTMENT TO EXPAND THE CHAPTER I PROGRAM TO MIDDLE AND HIGH SCHOOLS, PARTICULARLY IN AREAS WITH A HIGH CONCENTRATION OF AT-RISK STUDENTS, IN LARGE URBAN SCHOOLS, INSTEAD OF CREATING A NEW CATEGORICAL PROGRAM. THE FUNDS SHOULD BE AVAILABLE ONLY FOR DISTRICTS THAT AGREE TO CLEARLY STATE GOALS FOR STUDENT ACHIEVEMENT IN LEARNED COMPETENCIES, NOT JUST FOR DISTRICTS THAT MEET "SEAT TIME" REQUIREMENTS. IT ALSO MEANS THESE SCHOOLS NEED TO REACH OUT TO OTHER PARTS OF THE COMMUNITY TO ASSURE THERE IS THE APPROPRIATE MIX OF SOCIAL AND EDUCATION SERVICES THAT WE KNOW, THROUGH RESEARCH, IS REQUIRED FOR RETENTION OF AT-RISK STUDENTS.

A PREVENTION-FIRST STRATEGY SUGGESTS REDIRECTING THE VOCATIONAL EDUCATION PROGRAM FROM JOB-SPECIFIC-FOCUSED TRAINING TOWARD REVISED CURRICULUMS THAT ARE MORE BROADLY KNOWLEDGE-BASED AND THAT INCORPORATE MATH, WRITING, READING, AND EVEN ECONOMICS IN A REVISED CURRICULUM. THIS ALSO IMPLIES ELIMINATING THE

SEPARATE, ALL TOO OFTEN ISOLATED, VOCATIONAL EDUCATION GOVERNANCE STRUCTURE AT THE STATE AND LOCAL LEVEL.

IT DOES NOT MEAN ELIMINATING FROM THE SECONDARY OR POSTSECONDARY CURRICULUM OCCUPATIONAL PREPARATION COURSES THAT ARE CLOSELY LINKED TO THE NEEDS OF INDUSTRIES. IT DOES MEAN STATES NEED TO SYSTEMATICALLY IDENTIFY, IN CONCERT WITH THE BUSINESS AND LABOR COMMUNITIES, WHAT STUDENTS NEED TO KNOW TO SUCCEED AND WHAT THEY WILL BE TAUGHT. THE FIRST RECOMMENDATION THE TASK FORCE ON JOBS, GROWTH, AND COMPETITIVENESS MADE REGARDING STATE ACTION TO ASSURE A PRODUCTIVE WORK FORCE WAS TO BUILD THE BRIDGE BETWEEN THE CLASSROOM AND THE MARKET PLACE. THE SPECIFIC ACTION STEPS SUGGESTED ARE TO:

- ESTABLISH AN ONGOING FORUM THAT INCLUDES REPRESENTATIVES OF LABOR, BUSINESS, EDUCATION, AND LOCAL GOVERNMENT TO DEVELOP COMMON GOALS, EXPECTATIONS, AND INFORMATION.
- DEVISE TESTS AND ASSESSMENT TOOLS TO MEASURE THE KNOWLEDGE OF STUDENTS. EVALUATE THEIR EFFECTIVENESS IN RELATION TO ACTUAL JOB PERFORMANCE.
- NOTIFY THE EDUCATION AND TRAINING COMMUNITIES. STATE SHOULD NOTIFY THOSE PROVIDING EDUCATION AND TRAINING SERVICES THAT THESE MEASURES MAY BE USED IN EVALUATING THEIR PERFORMANCE.
- PROVIDE INFORMATION TO STUDENTS. IT IS IMPORTANT THAT STUDENTS UNDERSTAND THE TESTING AND ASSESSMENT PROCESS AND HAVE RELEVANT INSTRUCTION MATERIALS TO PREPARE FOR THOSE EVALUATIONS.

THIS SET OF RECOMMENDATIONS RECOGNIZED THAT WE DO NOT HAVE ANY ORGANIZED INFORMATION AND, THEREFORE, AGREEMENT ABOUT WHAT COMPETENCIES ARE NEEDED BY BROAD OCCUPATIONAL CLUSTERS FOR EITHER EMERGING OR CURRENT WORKERS. WITHOUT SUCH AGREEMENTS, WE HAVE USED SURROGATE MEASURES TO DETERMINE "READINESS," SUCH AS A HIGH SCHOOL DIPLOMA. THIS HAS CLEARLY PROVEN TO BE AN INADEQUATE SCREENING DEVISE FOR MANY. THE RECOMMENDATIONS ALSO REMAIN NEUTRAL ON WHO PROVIDES THE ACTUAL TRAINING BY SUGGESTING THAT ALL PROVIDERS WILL BE NOTIFIED OF THE EXPECTED COMPETENCIES THEIR ENROLLEES SHOULD LEARN. OF COURSE, IT WOULD BE POSSIBLE FOR ANY ONE PROVIDER OF A SERVICE TO SPECIALIZE IN A LIMITED SET OF TRAINING SERVICES.

IT IS IMPORTANT THAT THE FEDERAL GOVERNMENT RECOGNIZE THE STATE IS THE APPROPRIATE LEVEL OF GOVERNMENT TO ORGANIZE THIS ACTIVITY BECAUSE OF THEIR CONSTITUTIONAL RESPONSIBILITIES IN THE ARENA OF EDUCATION. IT WOULD BE POSSIBLE FOR STATES TO CONSIDER AN INTERSTATE EFFORT TO BE UNDERTAKEN BY INDIVIDUAL INDUSTRIAL SECTORS, THAT STATES COULD USE, MUCH LIKE WHAT HAS BEEN DONE FOR SOME APPRENTICESHIP PROGRAMS. BUT UNLIKE THE EUROPEAN COUNTRIES, THERE REALLY DOES NOT APPEAR TO BE ANY OTHER SOLUTION. AS JOHN BISHOP TESTIFIED, MUCH REMAINS TO BE DONE AND WE NEED TO ENCOURAGE THE STATES TO PUSH AHEAD ON THIS FRONT. IN FACT, IT REALLY IS A CONTINUUM OF THE EDUCATION REFORM OF THE STATES.

A PREVENTION STRATEGY ALSO IMPLIES TWO CRITICAL PREDICTORS OF FAILURE THAT NEED TO BE ELIMINATED. THE INCREASE IN THE NUMBER OF TEEN PARENTS AND TEEN USE OF DRUGS AND OTHER DEBILITATING SUBSTANCES. A WHOLE RANGE OF ISSUES EXIST AROUND A REDUCTION STRATEGY TO ELIMINATE THESE PREDICTORS OF FAILURE, BUT

THESE ARE NOT APPROPRIATE TO DISCUSS AT THIS TIME. HOWEVER, WE SHOULD RECOGNIZE THAT THE RANKS OF THE "HARD CORE" UNEMPLOYED ARE OVERREPRESENTED WITH INDIVIDUALS WITH THESE CONDITIONS. SECOND CHANCE PROGRAMS THAT DO NOT HAVE THE RESOURCES AND ACCESS TO KNOWLEDGEABLE STAFF TO HELP CLIENTS LEARN ABOUT THE RESPONSIBILITIES OF PARENTING FOR BOTH THE MOTHER AND THE FATHER, OR ABOUT THE CONSEQUENCES OF THE MISUSE OF DRUGS AND ALCOHOL, ARE CRIPPLED BY DEFINITION.

THE TERM "HARD CORE UNEMPLOYED" FRANKLY SHOULD BE USED WITH CAUTION. THE VAST MAJORITY OF PEOPLE DO HAVE SPELLS OF EMPLOYMENT. THE QUALITY OF THE JOB, THE QUALITY OF THE WORK, THE WAGE RATES, THE COST TO THE EMPLOYER OF HIRING THOSE NOT QUALIFIED AT THE OUTSET NEED TO BE FACTORED INTO THE STRATEGIES THAT ARE ADOPTED. ALSO QUESTIONS OF WHO SHOULD BEAR THE COST NEED TO BE CONSIDERED, FOR EXAMPLE: IS THE EMPLOYER TO BEAR THE COST OF "RETRAINING" CURRENT WORKERS WHEN BASIC LITERACY IS THE ISSUE? OR SHOULD THIS COST BE BORNE BY THE PUBLIC?

ALSO, BEFORE ONE DEVISES SOLUTIONS TO SOLVE THE TRAINING PROBLEMS OF THE HARD CORE UNEMPLOYED, IT IS NECESSARY FIRST TO DETERMINE JUST WHO IS MOST AT RISK OF BEING "UNEMPLOYABLE." ONE REASON SO MUCH TIME WAS SPENT ON THE DISCUSSION OF PREVENTION PROGRAMS IS THAT IF A STUDENT DROPS OUT OF SCHOOL OR IS A LOW-ACHIEVER, THESE ARE THE SINGLE MOST CRITICAL PREDICATORS OF ULTIMATELY BEING CLASSIFIED AS HARD CORE UNEMPLOYED. TEEN PARENTHOOD AND DRUG ABUSE ARE ALSO HIGH PREDICATORS. BEING ON WELFARE IS ANOTHER GOOD PREDICATOR, THOUGH NOT AS MUCH AS SOME WOULD SUGGEST.

ALL COUNTRIES NEED A SAFETY NET INCOME SUPPORT PROGRAM FOR THOSE WHO BY VIRTUE OF AGE, HEALTH, OR OTHER CONDITIONS BEYOND THEIR CONTROL HAVE INSUFFICIENT FISCAL RESOURCES TO PROVIDE FOR THEMSELVES ADEQUATE SHELTER, FOOD, HEALTH CARE, AND CLOTHING. BUT FOR SOME, WELFARE IS A POOR ALTERNATIVE TO WORKING TOWARD SELF-SUFFICIENCY. RECIPIENTS OF WELFARE ARE THEREFORE AN IMPORTANT TARGET POPULATION FOR JOB READINESS AND TRAINING SERVICES. YOU HAVE ALREADY BEEN ADVISED BY GOVERNOR CLINTON THAT RESTRUCTURING THE WELFARE SYSTEM IS ONE OF OUR ASSOCIATION'S HIGHEST PRIORITIES. I WANT TO MENTION TWO OPERATING PRINCIPLES IN THE PROGRAM DESIGN THE GOVERNORS ARE ADVOCATING FOR THE AT-RISK POPULATION BECAUSE THEY ARE APPLICABLE FAR BEYOND A REFORMED WELFARE SYSTEM. THEY ARE: ONE, A SOCIAL CONTRACT BETWEEN THE RECIPIENT AND THE GOVERNMENT; AND TWO, A CASE MANAGEMENT APPROACH.

THE FIRST IS THE RECOGNITION THAT THE INDIVIDUAL HAS RESPONSIBILITIES AS WELL AS THE GOVERNMENT. THE SECOND, PERHAPS MISLABELED BUT IMPORTANT, IS CASE MANAGEMENT ACCOUNTABILITY FOR ORGANIZING AND ARRANGING THE NEEDED SERVICES -- BE THEY DAY CARE, EDUCATION, TRAINING -- THAT SOMEONE WITHIN THE SYSTEM NEEDS TO BE HELD RESPONSIBLE FOR ASSURING THAT "SOMETHING" HAPPENS. THERE IS A NEUTRALITY ABOUT WHO OR WHAT INSTITUTION SHALL BE RESPONSIBLE FOR THE ACTUAL SERVICE. NEGOTIATED ARRANGEMENTS TO MEET THE SPECIFIC INDIVIDUAL NEEDS BASED UPON THE SIGNED SOCIAL CONTRACT WOULD DRIVE THE ENVISIONED SYSTEM. THE INDIVIDUAL IS INVOLVED IN MAKING CHOICES INSTEAD OF HAVING A PREPACKAGED SET OF SERVICES "OR LOOPS TO GO THROUGH" THRUST UPON THEM. THERE WOULD ALSO BE CONSEQUENCES IF THEY DON'T LIVE UP TO THEIR END OF THE BARGAIN.

THESE TWO CRITICALLY IMPORTANT OPERATING PRINCIPLES WERE DERIVED, IN PART, FROM THE CONCEPTS THAT ARE EMBODIED IN THE JOB TRAINING PARTNERSHIP ACT (JTPA). STATED DIFFERENTLY, JTPA IS A SYSTEM DRIVEN BY PERFORMANCE STANDARDS FOCUSED ON ENROLLEE OUTCOMES AND PERFORMANCE CONTRACTING; THERE ARE NO NATIONAL PRESUMPTIONS ABOUT WHICH ORGANIZATION OR INSTITUTION SHALL PROVIDE ANY GIVEN SERVICE. WHILE THE SYSTEM IS NOT PERFECT AND THE DEPARTMENT OF LABOR, STATES, AND LOCALITIES ARE CONSTANTLY PERFECTING THE SYSTEM, THESE ARE GOOD FEDERAL GOVERNMENT LEGISLATIVE STRATEGIES TO APPLY WHEN DESIGNING ANY PROGRAM. THE JTPA'S SYSTEM'S CLOSE ALIGNMENT WITH THE END USERS OF THE SERVICE AND THE EMPLOYER COMMUNITY THROUGH THE PRIVATE INDUSTRY COUNCILS ALSO MAKES IT A USEFUL MECHANISM WHEN DESIGNING PROGRAMS FOR THE HARD CORE UNEMPLOYED. IN OTHER WORDS, BOTH EMPLOYERS AND ENROLLEES ARE CLIENTS AND WE NEED TO DESIGN PROGRAMS THAT RECOGNIZE THE NEEDS OF BOTH.

IT IS NOT A PERFECT PIECE OF LEGISLATION, HOWEVER. LEGISLATIVE LIMITS ON FUNDS THAT CAN BE USED FOR WORK EXPERIENCE AND CONSTRAINTS ON SUPPORT SERVICES, PLUS BIASES BUILT INTO THE PERFORMANCE STANDARDS, DISCOURAGE FULL SERVICE PROGRAMS FOR INDIVIDUALS. THESE PROBLEMS CAN BE CORRECTED.

ONE OF THE SUBSTANTIAL DEFICIENCIES THAT YOU ARE AWARE OF IS LITERACY. EMPLOYERS HAVE IDENTIFIED IT AS A CONSISTENT PROBLEM, ONE WE CAN NOT IGNORE. ONE POSSIBILITY, IN MY PERSONAL OPINION, THAT CONGRESS SHOULD EXPLORE IS REDIRECTING THE ADULT BASIC EDUCATION (ABE) PROGRAM THROUGH THE JTPA SYSTEM. THIS IS NOT TO SAY THE ABE SYSTEM DOES NOT PROVIDE GOOD PROGRAMS; IT DOES. BUT IF THE POLICY CHOICE IS TO ALIGN THE NEEDS OF INDIVIDUALS TO PARTICIPATE EFFECTIVELY IN THE WORK PLACE, THEN LET US AT LEAST BE AWARE WE DO HAVE

CHOICES WITHIN CURRENT RESOURCES TO INCREASE THE ODDS OF SOLVING THE PROBLEM. IMPLICIT IN THIS SUGGESTION IS THE NEED TO FOCUS OUR ENERGIES ON WORK PLACE LITERACY AND MUCH OF THE LITERACY TRAINING SHOULD TAKE PLACE AT THE WORK SITE, IF POSSIBLE; BUT IT IS NOT A COST THAT SHOULD BE BORNE BY THE EMPLOYER.

YET ANOTHER TASK THAT NEEDS TO BE UNDERTAKEN AT THE FEDERAL LEVEL IS TAKING A LONG, HARD LOOK AND DECIDING WHAT WE AS A NATION WANT IN TERMS OF A LABOR EXCHANGE SERVICE (THE UNITED STATES EMPLOYMENT SERVICE). WE ARE THE ONLY INDUSTRIALIZED NATION THAT HAS ALLOWED THIS PROGRAM TO DRIFT. THERE WAS SOME PROGRESS IN TERMS OF SORTING OUT ROLES AND RESPONSIBILITIES AS A RESULT OF AMENDMENTS TO THE WAGNER/PEYSER ACT WHEN JTPA WAS ENACTED, BUT MORE REMAINS TO BE DONE.

THE NEED FOR A SYSTEM OF EMPLOYMENT SECURITY PROGRAMS THAT PROVIDES ALL JOB SEEKERS AND EMPLOYERS WITH SERVICES TO FACILITATE EFFECTIVE LABOR FORCE PARTICIPATION IS DESIRABLE. NGA IS IN THE PROCESS OF REVIEWING THE EMPLOYMENT SECURITY SYSTEM WITH A SPECIAL FOCUS ON THE FUNDING MECHANISMS. THROUGH THAT REVIEW, WE HAVE DISCOVERED THAT THE FOCUS ON CURRENT EMPLOYMENT SERVICES HAS BECOME BLURRED. WE BELIEVE THAT EMPLOYMENT SERVICES SHOULD BE ORGANIZED AROUND A FEW CORE SERVICES AND TEMPORARY INCOME ASSISTANCE. FURTHER, STATES SHOULD BE GIVEN MAXIMUM AUTHORITY TO ARRAY THE TYPE AND INTENSITY OF THOSE CASE SERVICES IN A MANNER THAT REFLECTS THE MARKET CONDITIONS AND NEEDS OF EACH INDIVIDUAL STATE. AGAIN THE OPERATING PRINCIPLE BEHIND THIS DESIGN SHOULD BE TO MEET THE NEEDS OF THE CLIENTS, BUSINESSES AND INDIVIDUALS. SOME WOULD CALL THIS A MARKET-DRIVEN SYSTEMS APPROACH.

SOME ALARMING STATISTICS ARE EMERGING FROM OUR EMPLOYMENT SECURITY SYSTEM. THE PERCENTAGE OF UNEMPLOYED PERSONS COVERED BY UNEMPLOYMENT COMPENSATION IS ON THE DECLINE. THIS SYSTEM, DESIGNED TO DEAL WITH SHORT-TERM CYCLICAL SPELLS OF UNEMPLOYMENT, NEEDS CAREFUL STUDY TO ASSURE ITS EFFECTIVENESS IN OUR NEW ECONOMY. THE HOUSE WAYS AND MEANS COMMITTEE HAS ANNOUNCED A SET OF HEARINGS ON THE UNEMPLOYMENT COMPENSATION SYSTEM. THOSE HEARINGS WILL PROVIDE AN IMPORTANT OPPORTUNITY TO REVIEW THE RELEVANCE OF OUR EMPLOYMENT SECURITY SYSTEM TO TODAY'S ECONOMIC CONDITIONS.

AS NOTED EARLIER, OUR EUROPEAN COUNTERPARTS HAVE BEEN WILLING TO USE THAT SYSTEM MORE CREATIVELY THAN WE HAVE. A CURRENT EXPERIMENT IN THE STATE OF NEW JERSEY HOLDS PROMISE THAT YOU SHOULD REVIEW. IT IS MY UNDERSTANDING THAT TWO MORE STATES, PENNSYLVANIA AND WASHINGTON, ARE ALSO GETTING READY TO LAUNCH NEW DEMONSTRATIONS REGARDING THE USE OF UNEMPLOYMENT INSURANCE FUNDS. AS YOU ARE AWARE, SOME STATES, ON THEIR OWN, HAVE ALREADY LAUNCHED EXPERIMENTS THAT LINK THE UI ADMINISTRATIVE STRUCTURE TO RETRAINING PROGRAMS. CALIFORNIA AND DELAWARE PROGRAMS HAVE ALREADY BEEN NOTED IN TESTIMONY BEFORE THIS COMMITTEE. NORTH CAROLINA RECENTLY PASSED NEW LEGISLATION MODELED AFTER THESE TWO STATES. IN OTHER WORDS, THE TIME IS NOW TO TAKE A FRESH LOOK AT BOTH OF THESE SYSTEMS THAT ARE NOW OVER FIFTY YEARS OLD. THEY NEED TO BE RETOOLED FOR THE 21ST CENTURY. WITHOUT THIS RETHINKING, WE WILL NOT BE ABLE TO PROVIDE A FULL RANGE OF SERVICES FOR THE HARD CORE UNEMPLOYED. MANY OF OUR AT-RISK POPULATION, PERHAPS WITH TOO MUCH FREQUENCY, COLLECT PAYMENTS FROM THIS PROGRAM. THEY CAN BE BENEFICIARIES OF A RESTRUCTURED SYSTEM.

THIS LITANY OF SPECIFIC SUGGESTIONS PROVIDES EXAMPLES OF WHAT WE CAN DO TO ORGANIZE AND ARRANGE A SET OF POLICY INITIATIVES THAT REDIRECTS AND ENHANCES CURRENT TOOLS IN ORDER TO DEVELOP A MORE COHERENT SYSTEM. A CONTINUUM APPROACH, BASED FIRST ON A PREVENTION MODEL, THEN ON A SET OF SUGGESTIONS TO IMPROVE THE "SECOND CHANCE" PROGRAMS SHOULD BE BASED ON THE CONCEPT WE SHOULD NOT PRESCRIBE WHO SHOULD PROVIDE A GIVEN SERVICE, BUT TO BUILD ON A MARKET-DRIVEN APPROACH USING A CASE MANAGEMENT/NEGOTIATED SERVICES SYSTEM TO PROVIDE SPECIFIC SERVICES. THE SUGGESTIONS ARE ALSO MADE FROM THE PERSPECTIVE OF HOW WE CAN BETTER LINK THE NEEDS OF WORKERS TO THE EXPENDITURE OF PUBLIC DOLLARS. THE PUBLIC DOLLARS SHOULD NOT BE SPENT FOR THE NARROW JOB-SPECIFIC TRAINING NEEDS OF A PARTICULAR EMPLOYER, BUT FOR THE BROADER KNOWLEDGE-BASED EDUCATION AND TRAINING NEEDS OF THE WORKER. THE PUBLIC GOAL MUST REMAIN ON THE SIDE OF A PRODUCTIVE, WELL-TRAINED WORKER CAPABLE OF TRANSFERRING SKILLS TO MORE THAN ONE WORK SITE.

UNIQUE FEDERAL RESPONSIBILITIES

FOR PURPOSES OF EFFICIENCY, COST EFFECTIVENESS, AND PROVIDING A COMMON FRAMEWORK TO MEASURE WHAT IS HAPPENING IN OUR SOCIETY, THERE HAS BEEN ACCEPTANCE OF THE FACT THAT FEDERAL GOVERNMENT IS IN THE BEST POSITION TO COLLECT AND ORGANIZE INFORMATION ABOUT THE SOCIO-ECONOMIC CONDITIONS OF OUR NATION. YET THIS CORE FUNCTION IS THREATENED WITH DECAY. FOR EXAMPLE, THE BUREAU OF LABOR STATISTICS (BLS) CANNOT EVEN PROVIDE ACCURATE MONTHLY STATE-BY-STATE INFORMATION OF THE EMPLOYMENT AND UNEMPLOYMENT CONDITION IN EACH STATE. THEY WERE UNABLE, DUE SOLELY TO FISCAL CONSTRAINTS, TO ADJUST THEIR SURVEY OF EMPLOYERS TO CAPTURE THE GROWTH OF SERVICE SECTOR INDUSTRIES.

MAKING IT ALMOST IMPOSSIBLE TO IDENTIFY THE IMPLICATIONS OF THIS GROWTH AND ITS IMPACT ON OUR TOTAL ECONOMY. ANY INFORMATION ABOUT THE SHIFTS IN TYPES OF JOBS AND SKILLS NEEDED FOR THESE JOBS IS BASED ON A TOTALLY OUTDATED CLASSIFICATION BASE. EDUCATORS AND TRAINERS FOR THE AT-RISK POPULATIONS AND STUDENTS IN GENERAL HAVE TOO OFTEN BEEN UNFAIRLY ACCUSED OF OFFERING INAPPROPRIATE TRAINING BASED ON INADEQUATE, OUTDATED INFORMATION FROM THE FEDERAL GOVERNMENT.

THE OFTEN QUOTED STATISTICS THAT YOU HEARD REGARDING EDUCATION ACHIEVEMENT AND LITERACY CONDITIONS ARE DERIVED FROM THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP). YET THAT TEST NEEDS TO BE SUBSTANTIALLY IMPROVED, EXPANDED TO COVER BOTH A LARGER NUMBER OF STUDENTS AND AGE RANGES. THIS NEEDS TO BE DONE IF WE ARE EVER TO HAVE AN ADEQUATE BAROMETER TO TELL US HOW OUR SCHOOLS ARE PERFORMING THEIR TASKS. UNFORTUNATELY, WE DO NOT HAVE A LARGE WINDOW OF TIME TO ALLOCATE THE APPROPRIATE RESOURCES TO ACHIEVE THIS GOAL. MONIES NEED TO BE ALLOCATED IN THIS YEAR'S APPROPRIATION TO IMPROVE NAEP AND THE COLLECTION OF OTHER EDUCATION STATISTICS THAT WILL TELL US WHAT OUR SCHOOLS ARE PRODUCING. THERE ARE OTHER EXAMPLES THAT COULD BE GIVEN REGARDING THIS CRITICAL FUNCTION OF THE FEDERAL GOVERNMENT, BUT HOPEFULLY THESE WILL SUFFICE AS GOOD EXAMPLES.

ANOTHER CRITICAL FUNCTION, BEST MANAGED BY THE FEDERAL GOVERNMENT, IS TO ASSURE THAT TECHNOLOGY TRANSFER OF BEST PRACTICES IS CARRIED OUT. THE NATIONAL SCIENCE FOUNDATION DOES A FAR BETTER JOB OF LINKING BASIC RESEARCH ACTIVITIES TO PRODUCT USE IN THE MARKET PLACE THAN THE LINE AGENCIES SUCH AS LABOR, EDUCATION, AND HHS. FOR EXAMPLE, YOU MAY HAVE HEARD OF THE OFTEN

REPEATED OBSERVATION ABOUT THE VALUE OF THE JOB CORPS PROGRAM. THE ARGUMENT PUT FORWARD BY MANY ADVOCATES OF THIS PROGRAM IS THAT IT IS A SUPERIOR TRAINING SYSTEM TO THOSE ADMINISTERED BY PROVIDERS IN LOCAL COMMUNITIES OPERATING NON-RESIDENTIAL PROGRAMS. PERHAPS THIS CLAIM IS ACCURATE; IF SO, THEN IS IT NOT INCUMBENT UPON THE FEDERAL GOVERNMENT TO SHARE WITH THESE LOCAL PROVIDERS THE CURRICULUM AND OTHER TRAINING MATERIALS DEVELOPED BY JOB CORPS? THE SAME OBSERVATION CAN BE MADE REGARDING THE LARGE INVESTMENTS THAT HAVE BEEN MADE, USING PUBLIC DOLLARS, TO PROVIDE COST-EFFICIENT AND EFFECTIVE REMEDIAL PROGRAMS FOR ARMED SERVICES PERSONNEL THAT COULD BE SHARED WITH OTHER TRAINING PROVIDERS WHO FOCUS ESSENTIALLY ON THE SAME TARGET POPULATION.

THERE ARE OTHER EXAMPLES THAT POINT OUT THE WEAKNESS OF THE LACK OF A TECHNOLOGY TRANSFER STRATEGY, BUT HOPEFULLY THESE TWO CAN CONVINCE YOU THE END RESULT IS NOT UNEXPECTED. WE WASTE AN UNTOLD AMOUNT OF TIME, ENERGY, AND RESOURCES BECAUSE WE LACK A COMMITMENT TO TECHNOLOGY TRANSFER FOR PROVIDERS.

THE FEDERAL GOVERNMENT ALSO HAS A CRITICAL ROLE IN PROVIDING FUNDS FOR RESEARCH, DEMONSTRATIONS, AND EVALUATIONS. UNFORTUNATELY, THESE CLASSIC FUNCTIONS ARE ALSO UNEVENLY EXECUTED BY DIFFERENT PARTS OF THE FEDERAL SYSTEM AND THERE IS MINIMAL EVIDENCE THAT ANY FUNDS ARE ALLOCATED BASED ON THE KNOWN GAPS IN OUR KNOWLEDGE ABOUT HOW TO PREPARE THE WORK FORCE FOR THE 21ST CENTURY, PARTICULARLY THE MOST AT RISK.

FOR EXAMPLE, WE KNOW THAT BETTER UTILIZATION OF COMPUTER-ASSISTED LEARNING TOOLS AND OTHER TECHNOLOGIES SUCH AS INTERACTIVE VIDEOS ARE VIABLE TOOLS THAT CAN HELP THE ADULT OR YOUTH WITH MATH, LANGUAGE, OR LITERACY IMPEDIMENTS, YET

THE FEDERAL DEPARTMENT OF EDUCATION DOES NOT HAVE THE IMPROVED USE OF SUCH TECHNOLOGIES ANYWHERE ON ITS LIST OF PRIORITY AREAS FOR EITHER RESEARCH, DEMONSTRATION, OR EVALUATION.

NOR ARE ANY FEDERAL RESOURCES DEVOTED TO RESEARCH OF HOW INDIVIDUALS LEARN SO THAT TEACHERS OR TRAINERS, IN ALL TYPES OF SETTINGS, COULD HAVE AN IMPROVED KNOWLEDGE BASE TO TEACH THE HIGHER ORDER SKILLS THAT YOU HAVE CONSISTENTLY HEARD ARE THE NEW "ESSENTIALS," IF PEOPLE ARE GOING TO BE PRODUCTIVE.

YET ANOTHER AREA THAT NEEDS CONSIDERABLE IMPROVEMENT WITHIN THE FEDERAL SYSTEM IS IMPROVED STRATEGIC PLANNING ON THE PART OF THE FEDERAL GOVERNMENT ITSELF. SHORT OF CREATING A MEGA AGENCY THAT WOULD PULL PARTS OF HEALTH AND HUMAN SERVICES, EDUCATION, MOST OF LABOR, PARTS OF COMMERCE, AND AGRICULTURE INTO A NEW STRUCTURE, SURELY IT IS NOT TOO MUCH FOR THE AMERICAN PEOPLE TO EXPECT THE APPROPRIATE PARTS OF ALL THOSE AGENCIES JUST MENTIONED TO AT LEAST OPERATE FROM A COMMON STRATEGIC PLAN. STATES AND LOCALITIES ARE PROVING IT CAN BE DONE, BUT IMPEDIMENTS DRIVEN BY THE ACTIONS OF THE FEDERAL GOVERNMENT DO NOT MAKE THE JOB EASY.

ONE SIMPLE EXAMPLE OF THE VALUE OF COMMON STRATEGIC PLANNING IS THE YEAR 2000 EFFORT YOU HAVE HEARD ABOUT FROM SECRETARY BROCK AND OTHERS. NOTABLE IN ITS ABSENCE FROM ANY PARTICIPATION IN THIS LAUDABLE, ALBEIT, SMALL EFFORT, IS THE DEPARTMENT OF EDUCATION. THIS IS TRAGIC.

PART OF THE PROBLEM RESTS WITH CONGRESS: YOU DO NOT ARTICULATE SUCH EXPECTATIONS, THEREFORE IT IS NOT SURPRISING THAT THE FEDERAL STRUCTURE DOES

NOT STRIVE TO ACHIEVE EITHER A COHERENT PREVENTION-FIRST STRATEGY, NOR AN INTEGRATED, STRATEGIC ACTION PLAN.

I THANK YOU, MR. CHAIRMAN, FOR ALLOWING ME THE OPPORTUNITY TO PROVIDE YOU WITH THESE THOUGHTS AND SPECIFIC SUGGESTIONS FOR HOW WE CAN IMPROVE THE CHANCES OF THE "HARD-CORE" UNEMPLOYED TO BECOME PRODUCTIVE MEMBERS OF OUR SOCIETY. THERE IS NO ONE SINGLE PIECE OF LEGISLATION, NO ONE SINGLE ACTION ON THE PART OF ANY LEVEL OF GOVERNMENT OR THE PRIVATE SECTOR THAT WILL ASSURE SUCCESS. WE HAVE LEARNED MUCH IN THE PAST 25 YEARS THAT CAN BE USED AS OPERATING PRINCIPALS TO REFINE, REALLOCATE, AND REPLICATE TO IMPROVE OUR CHANCES FOR SUCCESS.

Representative **Scheuer**. We will now hear from Mr. James Kadamus.

Please proceed, Mr. Kadamus.

STATEMENT OF JAMES A. KADAMUS, ASSISTANT COMMISSIONER FOR OCCUPATIONAL AND CONTINUING EDUCATION, NEW YORK STATE EDUCATION DEPARTMENT

Mr. **Kadamus**. Thank you, Mr. Chairman.

You have my prepared statement before you. I will focus just on the changes that we have made in New York State in the secondary and vocational program and the implications of that program and how it has formed the basis for many of our adult programs also.

You have heard from many witnesses who gave you opinions about vocational education and how it prepares students for the future work force. I am not here to tell you about the vocational education system as it existed when you were in school or when I was in school or how it existed even in the 1950's, in the 1960's or 1970's or even the early 1980's. I am here to talk to you about how the vocational education program in New York State and many other parts of this country is changing in the late 1980's to prepare the work force for the 1990's and for the 21st century.

In the 1950's and 1960's we had a work force and an economy that demanded disciplined workers who could do repetitive tasks in a manufacturing environment based on mass production principles. With technology and the economy of the 1980's and 1990's there are new demands for the work force, and today instead of workers who are able to do those repetitive tasks, we are now looking for workers who can be creative, solve problems, work in groups, who are trained for a variety of tasks and can adapt to a continually changing job market.

New York State was one of the first to change its vocational education program in response to the changing needs of the economy and of the work force. We did it in partnership with business and industry and labor with extensive involvement over a 4-year period, through a massive commitment and support of business and industry and labor to help us reevaluate and update our program.

Let me just refer you to the second page of my prepared statement, which outlines what our new program looks like. Our restructured high school program responds to changes in the economy by stressing more transferrable skills which provide students with maximum flexibility in selecting and achieving career goals.

We have a coordinated program that starts in the 7th and 8th grades and goes through the 12th grade and also coordinates with programs at our postsecondary institutions, particularly with the 2-year colleges.

It has four basic components: basic academic skills, which are reinforced through vocational education, particularly in the areas of occupational mathematics and science; transferrable skills, which students take in the seventh and eighth grades through our new program in home and career skills, which all students take; and an introduction to technology, which focuses on career planning and understanding systems of technology, on problem solving and decisionmaking concepts, on working in groups and how to manage materials and time and money in terms of projects, on how to show up on time, why it is important to show up on time, why it is important to be able to know what the bottom line of a company is.

People in business and industry ask me if we are teaching the work ethic in the schools, and we say yes. The core occupational program which is the heart of the occupational program is not job specific but prepares students for a cluster of jobs. It allows students to get skills that cut across the range of jobs.

Let me give you an example. In our business education program, which has the most students in our State, the core of the program is called business analysis/business computer applications. It deals with analyzing procedures with business, and it uses microcomputers to give students applications in word processing, spreadsheets, database management, and communications skills.

Essentially, we group students in office práctice, bookkeeping and accounting and data processing together because we found that the skills for those occupations are similar. There is a core of skills for those occupations.

The same goes in the health area. There is medical terminology, anatomy, physiology, and basic patient care. These core skills apply to a whole range of health occupations. It doesn't make any difference if you are a medical assistant, dental assistant, medical secretary. Those seem to be core skills.

In the trade area, understanding of mechanical systems, technology, computer-assisted design are the new core skills that we are teaching kids. It doesn't seem to make a great deal of difference what particular specific occupation they are going into.

The fourth part of our program we call specialized skills, job-specific training that we give toward the end of the high school program for students going into employment or into postsecondary education. We think this program provides students with a much broader base than they have had. It is not the narrow vocational program that many people are used to. It emphasizes interdisciplinary instruction.

For example, our agribusiness program is a growing program. Agriculture is important in the upstate areas. We have strong linkage with the postsecondary programs, and I am sure Dale Parnell will talk about the two-plus model. We have that going on in many parts of the State.

One of the most important parts of our program that I will stress—and it gets back to Joan Wills' comments in terms of accountability and outcomes—is our statewide testing program. We will start next year testing all students who take occupational education sequences in terms of whether or not they have a level of proficiency in those sequences. We will be able to guarantee to business and industry that students who pass these tests have those core skills when they graduate from high school from these programs.

This program was cited as a model by the National Governors' Association in one of their reports on jobs and competitiveness. We have also found the program to be a very strong motivating force to keep students in school. In New York City students in the vocational high schools are twice as likely to remain in school as they are if they are in other high schools in the city of New York.

Right now we are working to try to find ways to provide for more opportunities in vocational education for those students. We have some 5,000 to 10,000 students on a waiting list just to get into vocational high schools in our five largest cities. The limitations in terms of facilities, teaching personnel, and equipment are holding us back from further expansion of these programs.

We have also found that these programs can serve as the basis for many of the adult programs. These programs are included in my prepared statement. We have adult programs based on the new secondary program, taking advantage of the resources of our voc ed system in the State of New York by providing to people the skills that they need in the future.

There is tuition assistance for dislocated workers serving over 4,000 people. There is a 70 percent placement through this program, and another 15 to 20 percent of people in the program go on to college. A program to upgrade basic skills called the Workplace Literacy Program, which runs through labor unions in the State of New York, has just begun.

Representative SCHEUER. Are corporations involved in that program?

Mr. KADAMUS. Yes. It is a partnership between corporations, labor unions, and educational agencies. It is a brandnew program just started.

Representative SCHEUER. When you say workplace, that means corporation?

Mr. KADAMUS. That means people who are at work who have basic skills needs. What we are finding is that it is not just the people who did not learn the basic skills the first time. There are a couple of things going on.

One, the demands are changing. When I was in school 20 years ago, I didn't learn anything about computers. But now we are finding people who work at Rochester Products, in the GM plant at Rochester Products, need to know something about computers because they have gone into statistical process control—an entire new design process.

We are also finding that people who maybe could do fractions when they were in high school have skills decay because they haven't done them for 20 years. I cite in my prepared statement a report by Rand that has looked at skills decay in the military. We are finding that is a major issue in corporations in the United States. People need to be upgraded and refreshed in terms of how to do the things that they may have once learned in school.

We have also talked to you, in the prepared statement, about an upgrading program that with business and industry we have served over 100,000 workers to upgrade the job-specific skills. It is a partnership between education, business, and labor that works very well in our State and has resulted in a lot of changes in businesses and in vocational education.

You asked earlier witnesses what can you do to create better partnership with education. We found that advisory councils are not necessarily the answer.

Representative SCHEUER. Are not?

Mr. **Kadamus**. Are not necessarily the answer. They are good, they help, they provide support. But the need is getting teachers together with first-line supervisors in companies and when they get together and they start talking. It is not the personnel manager talking with the superintendent but, in fact, it is the classroom teacher working with people who are managers in the company who start talking about what is happening on the job. We find that the programs within the schools change as a result of that.

Representative **Scheuer**. Where is the drive, the leadership? Where does it come from? Presumably from on high to get production people on the floor, talking to vocational ed teachers?

Mr. **Kadamus**. Our program is called the employer-specific skills training program. It is regionally based. It is run through regional committees of educators, business, and labor people.

What we do is we have staff in the field who are brokers. They work with people in the business community. We find a business that wants to upgrade their work force. We then provide the financing. We then provide classroom instruction; the business provides release time for their employees, and so that is their contribution. And the instruction is 99 percent of the time delivered either through community colleges or vocational education agencies at the secondary level, the school systems.

Representative **Scheuer**. Where would the classroom be?

Mr. **Kadamus**. Many times it is at the college site or the school site. But many times it is right there in the corporation. It depends.

Representative **Scheuer**. Which is more effective? Which turns kids on?

Mr. **Kadamus**. I don't think it matters at that point because it depends—in small business they usually don't have the space. They don't have the classroom space. Bigger companies might have the classroom.

Representative **Scheuer**. How small is a small business? What is the smallest business that you consider it cost effective to work with?

Mr. **Kadamus**. About half the businesses we work with have less than 50 employees. In New York State a small business is less than 100 employees, although 75 percent of them are businesses in the State that have less than 25 employees.

Representative **Scheuer**. Seventy-five percent of the businesses have less than 25 employees?

Mr. **Kadamus**. In the State of New York we work with any business. But usually when it gets below 25, we try to use a consortium of businesses. The skills are not different; they cut across businesses. When you're dealing with a basic skills upgrade program, you might have half a dozen companies working in consortium, as we have in the Rochester area.

Representative **Scheuer**. Thank you very much. Your testimony was very interesting.

[The prepared statement of Mr. Kadamus follows:]

PREPARED STATEMENT OF JAMES A. KADAMUS

Chairman Scheuer, members of the Joint Economic Committee of Congress, Subcommittee on Education and Health, thank you for inviting me to speak about issues relating to our nation's future. Our nation's economy is in a state of transition and rapid change not previously experienced in our country. Some of these changes include greater effect of foreign competition on U.S. industries, shift in the economy based on manufacturing to one based on service and information, greater use of technology in the workplace and changing demographics of the workforce. The changes which are occurring today in the economy and the workforce have made increasing our competitiveness in world markets both a State and national objective.

You have heard from many witnesses who have given you opinions about how vocational education prepares students for the future workforce. I am not here to talk about vocational education as it existed when I was in school or when you were in school. I am not here to talk about vocational education programs of the 1970's and early 1980's. I am here to talk with you about how the vocational education program in New York State, and in many other parts of our country, is changing in the late 1980's in order to prepare and retrain the workforce of the 1990's and the 21st century.

In my home State of New York we are well aware of the paradoxes and challenges being created by the changes in the economy and the workforce. In New York City our growing finance, insurance and real estate sector produces job wages higher than those lost during the 1970's in manufacturing areas. But these new jobs require skill levels much higher than previously expected of workers. At the same time there is a growing group in New York City and other urban areas which continue to live in a cycle of poverty and dependency, lacking both basic and occupational skills and dependent on public assistance to meet their basic economic needs.

In areas of upstate New York State the loss of manufacturing jobs has resulted in significant numbers of dislocated workers needing education and training both in basic skills and new occupational areas or facing jobs in lower paid service occupations. The jobs in manufacturing which seemed so permanent and secure for many years for these workers have been replaced by jobs in service occupations or temporary employment. Many families that have managed to keep up with the cost of living do so only because they have adjusted their life style or they receive income from more than one member of the family.

The 1950's and 1960's demanded a workforce that was disciplined to do repetitive tasks in a manufacturing economy based on mass production. The 1970's changed our economy dramatically. Technology became a driving force for the country.

The information and service economy was born. Small businesses began to employ an increasing proportion of our workforce. With these changes came new demands for our workers. Today, instead of workers who are able to do repetitive tasks, and who were trained for specific jobs, we now want workers who are creative, can solve problems, can work in groups, are trained for a variety of tasks, and who can adapt to continually changing job demands.

As new demands are being placed on the workforce, our schools are responding. In the early to mid 1980's the educational reform movement changed academic requirements and increased standards in many states. In the last few years there has been increasing attention on revising vocational education programs throughout the country. New York State was one of the first states to completely changed its vocational education program in response to the changing needs of the economy and the workforce. Let me take a few minutes to outline the key features of our system:

- The restructured high school vocational education program responds to changes in the economy by stressing more transferable skills which provide students with maximum flexibility in selecting and achieving career goals.

- The new coordinated curriculum for students in grades 7-12 eliminates unnecessary gaps and overlaps in instruction and includes:

    - Basic Skills
    - Transferable skills
    - Core occupational skills
    - Specialized skills

- Transferable skills are provided in 7th and 8th grades in new programs mandated for all students by the end of grade eight, Home and Career Skills and Introduction to Technology, and in grades 9 and 10 in Introduction to Occupations.

- Emphasis is also placed on mathematics and science, with opportunities to get academic credit toward a high school diploma for vocational education students taking occupationally related math and science.

- There is also the opportunity for other vocational education courses to be used to meet academic credit requirements in such areas as English, Art, Health, Social Studies.

- Curriculum modules dealing with entrepreneurship skills are also included in every vocational education instructional area - responding to the growth of small business.
- Interdisciplinary sequences have been established so that students can combine interests to pursue a career, for example agriculture and business can be combined to pursue a career in agribusiness.
- Statewide testing is required of all core skills through occupational education proficiency tests to ensure that students who complete a vocational education program have the desired skills.

The restructured secondary occupational education program in New York State includes a diversified curriculum which reinforces academic skills and which provides students with broad transferable skills, core occupational skills for clusters of jobs, and specialized skills needed for employment. This new program not only provides students with skills needed for entry level employment but also with those skills needed to be able to advance in a career or to participate in additional training programs. It also provides students with skills that apply to more than one specific job and so gives them the flexibility to change occupations.

We believe in New York State, that this program will provide students who are in school now with the skills they need to be highly productive workers in a changing economy. Versions of our model are rapidly being implemented throughout the country. The National Governors Association in a recent report on the future of our nation's workforce cited New York State's model as an example of how vocational education can change to meet the challenges of the future. We have also found that our program is a strong motivating force for students to stay in school. We are currently reviewing ways in which more students can take advantage of our new vocational education program, especially in the largest cities of our State. We estimate that 5,000 - 10,000 students are not able to enroll in the vocational high schools in our State's five largest cities because of lack of facilities, equipment and teaching personnel. We are developing strategies for expanding vocational education opportunities in these cities especially in the city of New York where students are twice as likely to stay in school if they enroll in a program at a vocational high school.

Despite the strength of our secondary vocational education program in New York State, we recognize that much of the challenge of the future workforce will be in retraining the over 75% of our current workers who will be still employed in the year 2000. I would like to outline several programs for adults in New

York State, conducted through our vocational education system, which have been successful in providing adults with the skills they need to be productive workers in our economy. Many programs similar to these are being implemented throughout the country.

Programs for Dislocated Workers

Displacement of workers is for the most part due to changes in the economy and the nature of work. During the past 25 years, the United States has shifted from relative economic isolation to global interdependence. More than 70 percent of our goods producing industries are subject to foreign competition as compared to only 20 percent twenty years ago. In many cases those industries are not faring well in the growing international competition, causing plant shutdowns or relocation and worker displacement.

Our society and economy are rapidly changing and out of balance. For some who are thriving in information and high technology industries, it is a time of great growth. For those who are being displaced from work that seemed solid, important and permanent, it is a time of crisis, and uncertainty. For the long-term unemployed and educationally and economically disadvantaged, the possibility of a good job and a place in society is growing more remote.

According to a report by the Congressional Office of Technology Assessment entitled "Technology and Structural Unemployment: Reemploying Displaced Adults," 11.5 million American workers lost jobs because of plant shutdowns, or shrinking output over the 5 years 1979 to 1984. Of those who lost their jobs during the period, 5.1 million had held their former jobs for 3 or more years and could therefore be counted as dislocated workers. A Federal Bureau of Labor Statistics Study of these displaced workers showed that 43 percent were out of work for at least 27 weeks, and that nearly 25 percent had periods of joblessness that added up to a year or more. Many who were reemployed took a pay cut in their new jobs. Nearly half of all workers who were displaced worked in manufacturing industries. The Office of Technology Assessment Report estimated that only 5% of eligible displaced workers were being served in Job Training Partnership Act programs.

However, recent studies have shown a declining length of unemployment for displaced workers over the past 20 years. This can be attributed in part to rapid economic growth, and related skills shortages that are going to worsen in the future. With the aging of the "baby boom" generation, it is expected that the labor force will be dominated by "middle-aged" workers aged 25-54 years in the 1990's. There will also be a decline in the number of young (age 16-24) new entrants. This group will constitute only 16% of the labor force by 1990 in contrast to 20% in 1980.

The major source of new workers will be women and minorities. The issue will not be whether or not there are going to be jobs available, but whether there is going to be a match between the skills needed to fill the available jobs and the skills of those looking for employment.

Worker Literacy

One critical aspect of efforts to help dislocated workers adjust to the changes in the economy and become reemployed, is workplace literacy. Successful participation in most job training programs depends on trainees having adequate competence in such basic skills as reading, writing, oral communication, mathematics, computer literacy and job readiness skills. Lack of basic skills effectively blocks from participation in training programs many undereducated and disadvantaged persons who are priority populations to be served. Remedial education for the large number of displaced workers lacking basic skills is a clear but unmet need. A recent National Assessment of Education Progress (NAEP) indicates that minimum levels of literacy are no longer sufficient for people who must live and work in an increasingly complex and technological society, ("Learning to be Literate in America: Reading, Writing and Reasoning," National Assistant of Educational Professor, Educational Testing Service, March, 1987)

The New York State Education Department has undertaken several initiatives to address the literacy problem, not just for dislocated workers but for all adults in New York State. In 1984 the State Legislature established the Employment Preparation Education State Aid Program for adults age 21 or over and the Equivalent Attendance State Aid Program for persons age 16-20 to enroll in basic education, English-as-a-second-language and high school equivalency programs. Enrollments in adult literacy programs have almost doubled in the last three years from 85,000 to approximately 150,000 adults and out-of-school youth.

In the manufacturing sector, where industries may want to use more advanced technology to increase productivity, lack of basic skills is a problem in terms of upgrading employee skills to deal with technological advances. It is difficult to train someone in statistical process control when they cannot perform basic math functions or are reading at a third grade level. Business and industry are experiencing changes in production techniques and services which require wholesale adaptation by workers to processes and procedures for which they lack the necessary literacy skills. This lack of skills is not necessarily a result of a failure of schools to provide people with appropriate skills. Necessary literacy skills may have initially been taught but, because they were not used sufficiently, were lost over time. A recent study by the Rand Corporation for the Department of Defense, entitled Individual Ready Reserve Skill

Retention and Refresher Training Options, documents this phenomenon of "skills decay" for military reservists. The study, however, has relevance for the literacy skills of the civilian population.

In addition to retrieving basic skill competencies lost because of lack of use, workers need to be brought to a generally higher level of basic skills required for many jobs. In New York State we have connected up our Employer-specific Training Program, which provides funds for occupational training, with our Employment Preparation Education State aid program, which provides funds for basic skills training. In this way, when companies discover through an assessment of their workers that they need an upgrade in their basic skills before they can receive training to upgrade their occupational skills, through the vocational education delivery system we can offer assistance which meets both needs.

Congress has taken initial steps to address the literacy needs of the workplace by amending the Adult Education Act with a new section for workplace literacy programs, as part of the omnibus trade bill. However, the funding level is disappointing when compared to the need. We look toward the enactment of additional workplace literacy legislation as part of the omnibus education reauthorization bill.

Vocational Training

Funding of vocational training programs for dislocated workers and other unemployed workers to provide them with the necessary skills has been an issue at both the State and national levels. In 1985, the New York State Legislature enacted Section 7 of the New York State Occupational Retraining and Reemployment Act (ORRA-7), which provides a tuition assistance program for dislocated workers using funds under Title III of the Job Training Partnership Act. ORRA-7 authorizes up to $1,500 to be paid to approved training providers for each certified eligible person enrolled in a program leading to employment in designated occupational fields with favorable employment opportunities.

In order to be eligible to participate in this program, training providers must be licensed or certified by the State Education Department, offer approved non-degree programs with a minimum of 320 clock hours of instruction, and provide a record of program completers and placements for two years prior to the date of application.

In order to qualify for participation in the program, each dislocated worker must be registered with and be certified as eligible by the local New York State Department of Labor Job Service Office. Applicants must be individuals who (1) have been terminated or have received notice of termination or layoff from employment and are eligible for, currently collecting, or have exhausted their entitlement to unemployment compensation, and are unlikely to return to their previous industry or occupation; (2) have been terminated from, or have received a notice of termination of employment as a result of any permanent closure of a plant or facility; or (3) are long term unemployed and have limited opportunities for employment or reemployment in the same or a similar occupation in the area in which such individuals reside, including older individuals who have substantial barriers to employment by reason of age. The program permits those individuals participating to continue to collect unemployment compensation while participating in the training program.

Agencies eligible to apply include private sector employers, employee unions, community-based organizations, joint apprentice councils, local education agencies, boards of cooperative educational services, postsecondary institutions, licensed private schools, registered business schools, Service Delivery Area grant recipients under the Job Training Partnership Act (JTPA), and Private Industry Councils (PIC), as defined by the JTPA.

The ORRA-7 tuition assistance program is a joint venture between the New York State Departments of Labor and Education. As indicated, the Department of Labor's Job Service certifies the dislocated worker as eligible to participate in the program. The Job Service is also responsible for informing dislocated workers about the program. The Education Department is responsible for approving programs, for certifying agencies as eligible to participate and for making payments to the training providers. The Labor Department and the Education Department determine jointly the occupations with favorable employment opportunities.

The ORRA-7 program has grown steadily in New York State over the relatively short period of time it has been in operation. As of July 31, 1987, 4,352 students have been or are currently enrolled in training programs, with 158 agencies approved as providers to offer some 1253 programs. The average ORRA-7 student spends 43.5 weeks in a training program and his/her attendance rate is 90.7 percent. The average cost of a week of training for each student in ORRA-7 is less than $35. The placement rate for those who have completed training is approximately 63 percent statewide, based on statistics submitted by the State Labor Department to the Federal government, as of June 30, 1986. Furthermore the number of ORRA-7 participants continuing their education and training, either in college degree or other advance training is approximately 15 to 20 percent. These dislocated workers are receiving the skills they need to be competitive in the workplace of the future.

Unfortunately, because demand for the tuition assistance has been so great, all ORRA-7 funds for Program Year 1987-88 have already been obligated. As of September 30, 1987 we had received requests for permission to enroll over 675 dislocated workers in retaining programs for which no ORRA-7 funds are available. While the program year goes from July 1, 1987 to June 30, 1988, individuals who apply from now until July 1,1988 cannot be provided with tuition assistance because funds are no longer available for this fiscal year. There is a need for increased Federal funding to ensure that training opportunities are provided to all who could benefit by them to obtain productive employment.

Skills Upgrading for Business and Industry

To help business and industry respond to the changes in the economy and to meet the retraining and skills upgrading needs of their workers, New York State has established an employer-specific training program. Through a statewide network of ten Regional Education Centers for Economic Development, the vocational education system works with firms and economic developers to design customized training programs to help firms remain, expand or come into the State.

The Regional Education Centers help to identify training needs of business and industry related to retention, attraction, expansion or technological upgrading and arrange for business specific training programs to address these needs. Each center is governed by a coordinating committee with representatives of secondary and postsecondary institutions, business and industry, economic developers, labor, vocational rehabilitation and other areas.

The Employer Specific Training Program has grown to be an integral part of our State's strategy for assisting New York State's businesses to upgrade skills of workers and meet changing demands of the economy. Funding for the Program comes from Vocational Education Act funds, Title III funds under the Job Training Partnership Act (JTPA), Title II 8% funds under JTPA and State funds under the Employer Specific Skills Training Grant Program. In the last three years the program has served close to 110,000 trainees and more than 1300 individual firms. An evaluation of the Employer-specific Training Program was commissioned by the New York State Legislature and was conducted on programs operated during the 1985 program year. The evaluation indicated that the firms that participated in the program were very satisfied with the training programs offered, with seventy-four percent attributing increases in productivity to the training. Through increases in productivity and upgrading of employee skills for higher level positions, the Employer-specific Training Program has also lead to substantial job creation.

According to an article in the April,1987 issue of Training magazine entitled "Supply Side Schooling," helping businesses to upgrade the skills of their workers is viewed as a new mission by many vocational educators. In New York State, the benefits of the employer-specific training program go beyond meeting the needs of individuals and companies. Employer-specific skills training program can have a beneficial impact on the education agencies and institutions providing the training, as well as on the companies and individual workers for whom the training was provided. Benefits reported by educational agencies include: curriculum enhancement, improved facilities and equipment, skills upgrading of education agency instructors; increased staffing to meet industry needs; increased adult enrollments; improved use of facilities; and other indicators of increased effectiveness of education agencies in serving as training specialists for business and industry.

Programs for Welfare Recipients

One group of adults on which the State has placed particular emphasis for both basic skills and vocational training is public assistance recipients. Research shows that a lack of education and literacy skills is a prime deterrent for most people receiving public assistance in finding adequately paid, meaningful work. In New York State fully half of the people on public assistance don't have a high school diploma. According to Sidney Johnson, executive director of the American Public Welfare Association, less than 1 percent of the nation's high school graduates live in poverty. It is clear that if our goal is to help welfare recipients become more productive and employable citizens, we need to establish a comprehensive program to upgrade their current capabilities and readiness for training or employment.

In New York State the State Education Department and the Department of Social Services are working together to emphasize the importance of education and training for people receiving public assistance. A major initiative was undertaken with State Welfare Education Program (WEP) funds for public assistance recipients in New York City. The New York State Education Department, the New York State Department of Social Services, and the New York City Board of Education are cooperating in a pilot program called "Project Prepare." Project Prepare provides intensive job counseling, training and educational services to New York City residents who are recipients of aid to Families with Dependent Children (AFDC) and who lack the necessary educational skills to participate in the labor market.

An important feature of Project Prepare is coordination of the services provided by educational agencies with the services of other State and local agencies so that a continuum of service is provided and client progress is monitored throughout the program. The New York City Human Resources Administration (HRA) provides clients with supportive service such as child care and transportation as well as referral through HRA's Employment Opportunities (EO) Offices. As clients complete their educational, work experience or occupational training components, they are referred for job placement.

Linkages with the social services system to provide better case management for welfare recipients who have received basic skills instruction or need vocational training are being implemented in various areas of the State. A request for proposals was issued under the Vocational Education Act which combines $200,000 from the Department of Social Services with $200,000 under the VEA for projects to provide a comprehensive set of services to Aid to Families with Dependent Children (AFDC) recipients. It builds on the basic skills programs operated under the Welfare Education Program.

In New York State, three quarters of a million people receive vocational education in over 1200 secondary, postsecondary and proprietary institutions each year. We invest over $900,000,000 in Federal, State and local funds for these programs. We must make sure that our investment pays off by holding the system accountable to educate workers for the future. The productivity and competitive position of our nation depends on the skills of this workforce. But also our very quality of life depends on the quality of our vocational education programs. We may not use the services of a doctor, lawyer or research scientist every day. However, it is likely that every day we will need to use the services of a person with vocational skills. These are the people who will make the machines of the future, who will fix the computers and robots, who will build our houses and offices, who will prepare our food, who will take care of the sick, the elderly and the children. The vast majority of these people will get their skills through vocational education. Our future depends on it!

Thank you for the opportunity to present testimony on this important issue.

Representative SCHEUER. We will hear from Ms. Strumpf now.

STATEMENT OF LORI STRUMPF, PRESIDENT, STRUMPF ASSOCIATES, AND PROJECT DIRECTOR, CENTER FOR REMEDIATION DESIGN

Ms. STRUMPF. I am glad to be here today to discuss employment and education and how young people transition from school to work.

I would like to make note that I am here representing the Center for Remediation Design to the degree that the center has sponsored my activities, those five national organizations that you mentioned before, and that my observations come from having assisted 17 private industry councils in service delivery areas over the last year and a half provide basic skills remediation programs to at-risk youths who have been eligible for the Job Training Partnership Act programs.

I would like to note, however, that my testimony does not represent the official views of any organization individually.

We have heard a lot about the demographics through the course of this hearing today in other testimony. I would like to start in the short time allotted to me with examining what young people don't know and really starting with youth for a minute, what young people know and don't know how to do as it applies to what employers need them to do.

Recently, there was a study done by the National Assessment of Educational Progress for NAEP, as it has been called, which has defined, I think, the functional gap between what young people learn in school and how to apply these skills to the work place. The study found that 95 percent of all 21-to-25-year-olds can read and understand the printed word at the fourth-grade level, and over 80 percent exceed the eighth-grade level. However, the bad news is that less than 50 percent can understand complex material.

What the survey found, quite simply, is that most young people can perform simple information searches and direct entry of information onto a form, but when the very same youth functioning at high levels on the simple tasks are asked to perform multistep processes, their performance declines drastically. It becomes increasingly evident, I think, that we cannot do very much with what we know.

I also, in terms of talking about what kids need or what young people need and how to design programs and help them make the transition, would like to recount that I recently had the good fortune to moderate a panel of six young people who had participated in employment training programs in the State of Ohio. While all of their stories were quite different, there were two similarities that struck me. We have heard of them as we have listened to how programs are designed and they are reinforcing in terms of what young people say about what they need.

The first thing that struck me as similar about the young people—economically disadvantaged, at-risk young people—was that they all had dreams. They all had dreams of being something versus what the uninitiated observe might think that "These young people never want to be anything." They can answer the question, "What do you want to be when you grow up?" They can talk about wanting to be doctors, lawyers, and entrepreneurs and astronauts.

The difference between those young people and many of the white middle-class young people referred to in the prior panel is that the connection between the goal of being an astronaut and what it takes to get there is lacking in these young people.

The second similarity among what these young people had to say about what they need and what the programs had done for them was all of them recounted the importance of a single individual within the program that became their mentor or their best friend, so to speak, that assisted them in transitioning from all of the variety, the myriad of program components between—just as you cannot understand what is the structure, tell me again what is the structure, making young people understand how to move to the work structure from the school structure and deal with situations at home as well.

They all talked about the importance of this individual, and I think that is an important message to hear from these young people. It seems to me that the Job Training Program, the JTPA or combined work and education program, provided these young people and many of the others that I have spoken to across the country that participate in programs, self-motivation, making the connections between what they learned in school and how that knowledge could be used at work, assessing their individual capabilities, reassessment of goals and basic academics.

I would like to talk a little bit about what the Job Training Partnership Training programs have been able to do to help assist young people, the same young people around the country, in meeting those goals, providing them with self-motivation, and answer the question, "What can we do to reach out to those who do not have the academic skills and work skills necessary to fulfill their individual goals? How do we take what the young people identify as what they need and what has worked for them and move it into a programmatic and public policy kind of basis?"

In many communities, the job training situation is providing a catalyst for how the schools operate. They are particularly changing the way the schools identify those who are most at-risk.

And those being most at-risk are those who are deficient in basic skills and work skills. If a multitude of community institutions are going to come together to identify and then develop programs for those most at-risk, it seems to me that the first thing that needs to happen is that common definitions which cross institutions must be developed.

These definitions must be focused on need, not based so much on demographics or membership in a particular group.

And I see the red light, and I will——

Representative SCHEUER. Take another minute or two.

Ms. STRUMPF. The second, and I think this address—when Bill was speaking, when Mr. Spring talked about the Boston Compact and many of the ideas inherent in how it works in the various groups that came together to make it work—I think that we need to take the lessons from that and many other programs and build them into a set of design principles and stop reinventing the wheel and talk about what we know works from those experiences.

So a common set of design principles that facilitate the one-on-one interaction, particularly that the young people on the panel I spoke about mentioned; programs must combine work and learning, provide intensity of training and intensity is the whole issue of staffing, and ability for staff to interact with the young person on a multitude of levels, be delivered through alternative instructional methodologies and alternative settings, the open entry/open exit and, finally, individualized and competency based.

And I think, in addition, a commitment must be made to develop long-term evaluation strategies which examine programs of participants' success; common definitions and design principles across institutions will move the overall education and employment system toward a continuum of services concept, which I think we have been trying to move this country to for a long time.

When you talk about who made it happen, how did it happen, moving away from having, relying on individuals who are motivated in communities, which is really what the answer to the question is, and trying to set up that continuum of services.

Thank you.

Representative SCHEUER. Thank you very much.

[The prepared statement of Ms. Strumpf follows:]

PREPARED STATEMENT OF LORI STRUMPF

Mr. Chairman, members of the Subcommittee, I am Lori Strumpf, President of Strumpf Associates and Project Director for the Center for Remediation Design. The Center for Remediation Design is a financial collaboration of the U.S. Conference of Mayors, the National Association of Private Industry Councils, the National Job Training Partnership, the National Alliance of Business and the National Association of Counties. A few years ago these national organizations were concerned that there was no centralized service to assist Private Industry Councils and Service Delivery Areas, created under the Job Training Partnership Act, to meet the challenges of designing programs to improve basic academic skills for youth. Instead of inventing separate wheels, they joined forces to create the Center, which provides training and technical assistance on their behalf to PICs, local elected officials and professional staff involved in the employment and training system.

I am pleased to appear before you today to discuss youth education and employment. I will focus on how youth transition from education to work, why some youth do not acquire the skills necessary to make the transition and to share some thoughts on how to impart necessary work and education skills to those youth who are most at risk of becoming chronically unemployed.

Before turning to my formal comments, I would like to note one point. My testimony today does not represent the official view of any of the organizations which sponsor the Center for Remediation Design. Rather, this testimony is based on my work over the last five years providing assistance to PICs, SDAs, school systems and state employment agencies as they meet the policy and program challenges put before them through the Job Training Partnership Act.

These observations are from the vantage point of providing on-site technical assistance to over 150 PICs and SDAs, conducting 14 two-day seminars on youth programs attended by over 600 professional staff, managing a six-site PIC youth employment competency demonstration program and a three-site PIC/education collaboration demonstration program. Most recently, through the work of the Center, these observations are developed from providing on-site intensive technical assistance to 17 PICs and SDAs as they struggle to provide basic academic remediation services to those youth most at risk in their communities. The challenges faced in providing these services include developing true collaborations with schools, community based organizations and business so that the young people who are most at risk of dropping out of school and those dropouts most at risk of chronic unemployment will be provided the best each sector has to offer in developing comprehensive training and education programs.

Mr. Chairman, I think it is fair to say that the nation presently faces one of its most vexing problems -- that of providing youth most at risk of chronic unemployment with the necessary education and work sills they need to become employable in a time when the economy faces major changes and the nature of the labor force is changing as well. I also think it is fair to say that most members of private industry councils, local elected officials involved in job training, and educators are committed to finding solutions to this problem. However, when trying to sort through the labyrinth of community institutions whose responsibility it may be to develop policies and programs which teach basic academic skills and work skills, potential solutions often get lost or cast aside.

Not long ago this country could afford to "write off" some of our young. We never quite said it out loud -- no matter how focused (or targeted) our policies and institutions were on those "most in need" we often end up promoting those perceived to be the most talented while letting the others slip through our institutional fingers. It is necessary now more than ever before to insure that while those who are most talented are moved ahead, those who need an extra push to excel are not left behind. Up to now, the loss of those at the bottom of the labor que did not have an impact on our nation's productivity and economic future. There were more youth than were necessary to fill society's needs. More to choose from to fill available jobs and to foster a nation's economic growth and competitiveness.

No longer. Maryland's Superintendent of Schools, David Hornbeck said recently, "Today, because we need all kids, we all become the victim. The demographics no longer permit throw-away or disposable children."

Briefly, what are those demographics?

The profile of the American workforce is changing. Labor market demand is changing. By the turn of the century there may be more jobs available than workers to fill them. That's good news. The bad news is that the number of young adults entering the workforce is decreasing and a growing percentage of these new workers lack the basic skills required to fit into available jobs.

As jobs in the service industry continue to increase, the nature of entry level employment is taking on new dimensions. No longer can industry afford employees who cannot read, write, communicate and process information. Employer surveys bear out the fact that employers view these basic academic skills as necessary to an individual's ability to get and keep a job.

However, a mismatch between the jobs available and the skills potential employees bring to those jobs is occurring. The U.S. Department of Education estimates that the number of functional illiterates grows by 2.3 million every year--including 850,000 high school dropouts and another 150,000 "pushouts" who graduate with inadequate reading and writing skills. The public schools remain avenues to literacy in this country for many Americans, yet it is apparent that the schools lack the ability to capture and motivate a certain type of student -- those at risk of being deficient in basic skills. Those who are behind in school are at risk of becoming potential dropouts. Dropouts are at risk of being unemployed or of having lower earnings over their lifetime than graduates. The national education association predicts that 1 out of every 4 students entering the eight grade in 1986 will not complete high school. Research indicates that many factors play a role in whether a young person will drop out of school including:

- **Academic history;**
- **Survival factors (marriage, pregnancy, etc.);**
- **Social factors (incarceration; drug dependency, etc.); and**
- **Environmental factors (socioeconomic status, home support, etc.)**

Current studies show that while all of these factors are related, if any one has a singular predictive value it is academic history. Early detection of basic skills deficiencies may provide better identification of potential dropouts rather than using other singular indicators, such as socioeconomic status.

Soon, if the problem continues to go unsolved, employers may no longer have a choice. To meet entry level employment needs, employers will have to hire those deficient in basic skills. The problem poses an economic threat and can no longer be viewed as purely a problem of and for educational institutions.

This problem threatens the economic health of our society over the next 20 years. The number of youth (14-24) that will make up the labor force is dwindling in absolute numbers. The numbers of minorities, women and immigrants (14-24) is increasing. Minorities are disproportionately represented within the dropout population. Being a high school dropout decreases job opportunities. Being poor -- as is 1 out of 5 of this nation's youth -- increases the likelihood of dropping out. These same young adults will make up the labor force in the near future, yet right now they take the least advantage of educational opportunities and have little access to work opportunities which teach the skills necessary for productive employment.

The problem is broader than any one institution can handle in isolation. Communities must work together to provide opportunities for all youth to attain the work and education skills they need to become contributing members of society.

In a very real sense, how do these demographics affect the labor needs of potential employers? I think some brief examples will help to illustrate the point.

This year, New York telephone had to interview 90,000 candidates to fill 2,000 jobs that didn't even require a high school diploma. Eighty-four percent of the applicants failed the examination.

A manager of Blue Cross/Blue Shield in Boston recently noted that they have to "bring in people who we might not have hired before...many who are marginally illiterate." For many employees, Blue Cross' job training now includes the three Rs.

The educational shortfall shows up clearly at employers such as New York-based Chemical Bank, which hires up to 700 tellers a year, most of them minorities. Chemical does a five-minute screening to see how well each applicant communicates and fills out a job application. Only one in five is accepted for the next step of the hiring process, a 45-minute, 8th grade level math test. In 1983 the pass rate for this exam was 70%. Today its only 55%.

The mismatch between skills and jobs is starting to affect employers everywhere. Once anyone who could read could process insurance claims. But as corporate clients push to hold down medical expenditures, for example, they want their insurers to certify that a doctor or dentist has used the best procedure. "So now we have people in jobs who must draw inferences that they didn't have to before," according to an Aetna executive. "Then we hand them a computer, which gives them more information. Our jobs are becoming more complex."

What is the nature of the basic skills deficiency among the nation's youth which creates the mismatch between the workforce and the needs of employers, therefore inhibiting a full transition between school and work?

A recent study done by the National Assessment of Educational Progress (NAEP) helps to define the functional gap between what young people learn in school and how to apply these skills to the workplace. In this study of 21-25 year olds, the initial news is good. The study found that 95% of all 21-25 year olds can read and understand the printed word at the 4th grade level, and 80% meet or exceed the 8th grade level. However, less than 50% can understand complex material.

What is meant by complex material? In this study literacy is defined as using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential. This definition implies an ability to do something rather than knowledge of something.

Authors of The Subtle Danger, a thoughtful analysis of the facts presented in the NAEP study, point out that literacy in and of itself is a functional skill, requiring the application of various skills in common, everyday situations. They conclude that the "literacy skill levels found int he NAEP survey are not adequate, on average, for maintaining world leadership in a changing, technological society at the end of the twentieth century."

What the survey found and the analysis illuminates is quite simply that most young people can perform simple information searches and direct entry of information on a form. But when the very same youth functioning at a high level on simple tasks are asked to perform multistep processes, for example -- computing the change that would be received from $3.00 for two items ordered from a lunch menu -- performance declines. The solution to the above problem requires multiple steps-finding the two items, adding them up and subtracting from $3.00. Only 56.4% did this correctly. It becomes increasingly evident that we can not do very much with what we know.

Recently, I had the good fortune to moderate a panel of six young people who had participated in JTPA programs in the state of Ohio. These young people were testifying before state and local public policymakers. They were asked to testify on what it is like "growing up in America" -- the pressures, the anxieties, the choices they face and the consequences of making certain choices. As you can image, each of the youth was as unique as their stories -- stories which ranged from gang involvement, parents who were alcohol and drug abusers, teenage pregnancy and parenting, to finding oneself on welfare due to a father's dislocation from the coal mines.

As different as their stories, several similarities struck me about all of these young people. Each one of them had dreams. The dream of "becoming something". Each child had had a dream even before their involvement in JTPA programs. However, they did not have very many opportunities to gain the skills necessary to make the dream a reality. The JTPA program provided them opportunities to shape their dream, make it realistic and perhaps most importantly, to believe every day that if they worked at it their dreams could come true.

Self motivation, making the connections between what they learned in school and how that knowledge could be used at work, assessing their individual capabilities, reassessment of goals, and basic academics were the tools the JTPA programs offered to these youth. Perhaps the most striking message from these youth was about how these tools were imparted. Each one of these youth talked about the importance of a specific adult in the program with whom they developed a relationship, a mentor, if you will, or a best friend. The importance of this one person in making these youth believe in their own abilities cannot be overstated.

These six youth are representative of most of the youth I have met in programs across the county. Initially, these youth might strike the uninitiated observer as not having an answer to the question "what do you want to be when you grow up?" However, upon further investigation it becomes apparent that most of these youth do have dreams -- and rather conventional ones at that-- they want to be doctors, lawyers, astronauts and entrepreneurs. It is the relationship between the goal of wanting to be an astronaut and the actions necessary to get there that is lacking. It is not knowing how to overcome barriers to learning and how to access employment. It is not feeling in control of one's life that leads to bad choices. It is the inability to translate the dream into a realistic goal which frustrates and often moves these youth to loose the dream and to choose less than productive avenues in life. It is not having someone who believes in their potential.

The peoples of the Kalahari desert have a saying that "there is a dream dreaming us." The young people we loose everyday to poverty and to inattention are our dreams -- yours and mine, because they represent our nation's future.

The question before you as public policy makers is how can we fan the dreams and aspirations of these youth -- keep them alive rather than let them be smothered by poverty, drug abuse, teenage pregnancy and parenting, and inattentiveness by the very social institutions put in place to be attentive to their needs. How can we create an environment which provides these youth with the skills they need to be productive and contributing members of society. How can we provide at risk youth with opportunities to acquire knowledge, learn skills and learn to do something with both their knowledge and their skills which will then enhance their ability to bring the appropriate skills to a changing labor market.

The latest report of the Committee for Economic Development, which represents the top business leaders in the country says, "This nation cannot continue to compete and prosper in the global arena when more than one-fifth of our children live in poverty and grow up in ignorance. The nation can ill-afford such an egregious waste of human resources." They state further that our growing "educational underclass" makes "no economic sense".

Recommendations

What can we do to reach out to those who do not have the academic skills and work skills necessary to fulfill their individual goals, compete for jobs and therefore, assure the nation's economic independence?

In many communities around the country, the job training system is providing a catalyst for changing the way the school system does business. Particularly the way that schools deal with those youth that have the highest potential for dropping out. Restructuring the schools, as well as trying to get them to focus on those most at risk (most deficient in basic skills) is not easy. What steps can policymakers at the federal, state or local level do to facilitate such change?

First, if a multitude of community institutions are going to work together to identify and then develop programs for those most at risk -- common definitions which cross institutions must be developed. These definitions should be based on need -- not demographics. Common wisdom -- as well as much research -- tells us that youth who do not have functional basic skills will not be competitive in the labor market. If this is true, those who are most at risk ought to be identified by their need for (or lack of) basic skills and work skills, rather than by their membership in a particular group. Other barriers that are prohibitive to participating in educational opportunities as well as training for employment should build upon the fact that a youth is deficient in a set of skills -- both academic and work related.

The way in which institutions are structured to provide services, promoted by legislative mandates, start with definitions of who is "eligible" to receive the service. Even when the definition is economically based, the economic distinctions vary. Each institution may have the same general mandate -- to serve those at risk, but each institution has a different view (legislative definition) of who that is. Given this wide variety, trying to combine resources for those most at risk can be trying at best. At the very least, education and employment institutions must agree on some common criteria.

Second, a common set of program design principles, again across institutions, should be identified as basic to programs which serve those most at risk. Whether these programs are programs for youth still in school or for those who have already dropped out, these principles have proven effective when used as a guide to plan, design, and implement basic skill remediation programs. These principles also facilitate one to one interaction, which the young people I referred to earlier stressed as so important.

Programs for the most at risk youth must combine work and learning; provide intensity of training; be delivered through alternative instructional methodologies and alternative settings; be open entry-open exit, and finally individualized and competency based. In addition, a commitment must be made to develop long-term evaluation strategies which examine program and participant success. The information from these evaluations can be used to identify problems and build on successes.

I would like to briefly examine each of these design principles and discuss how they have been built into actual program designs.

What does it mean to combine education and work? Overall, it means implementing a philosophy through staff of the program that constantly makes the connections for young people about what the program teaches and how that relates to work. In a more specific sense, it means designing basic skills curricula and instructional methodologies which teach basic academics through functional, or work and life related actives.

Work can be integrated into a sequential design which links educational services provided in the year-round school programs to summer work experiences. One example which combines learning and work is to make a certain number of summer jobs available to youth who achieve certain milestones in the educational component. This strategy may be motivating to certain youth, particularly if there are more youth than jobs available during the summer. Work can also be provided concurrently with learning through provision of actual experiences working that are part of the school day.

A critical element to actual work experiences is to orient employers so that they "buy in" to the program philosophy. Buying in means that employers, along with the teachers, will be making work/education connections. This can be done on a variety of levels, from having the employer simply ask everyday "did you go to school today" to actually teaching some basic skills at the very moment the young person is performing a job related function.

The amount of time a young person spends in a basic skills remediation programs, as an isolated factor, is not as important as how intense, or concentrated, the program is. The programs success will not be just a function of its duration but depends a great deal on how intense each service component is.

Combining work and learning in a structure that makes "moment to moment" connections begins to develop the intensity of the program. Learning that occurs in small units with immediate payoffs is another way to build in intensity. Providing support to youth which allows them to work out any job related, home related, or education related problems continues to build up the intensity of the program's structure.

To successfully implement an intensive service delivery strategy means paying attention to the staffing pattern of the program. Staff to participant ratios must be reduced at both worksites and in the educational environment to allow for more intensive interaction. Teachers may need to have different kinds of credentials and job descriptions than are necessary for traditional classroom settings.

Providing basic skills in an open entry/open exit/competency based format builds intensity into the curricula for the program. A commitment to open entry - open exit means that "seat time" is not important. "Time on task" is the critical structural issue.

Competency based means providing young people with an opportunity to learn what they need to know not what they already know. True competency based instruction provides for adequate assessments and learning plans which start where the youth is currently and allows the youth to finish when their goals are accomplished for that component part of the program. Youth than move into the next service sequence at their own pace, not in relationship to others in the "class".

One teaching strategy that assists in building intensity into program designs and is helpful in keeping the curriculum open entry/open exit is computer assisted instruction.

To implement many of the preceding principles means developing learning settings that are non-traditional. Two structures come to mind when thinking through how to deliver educational instruction, in the classroom and at the worksite.

To provide a nontraditional environment within a structure where youth must go to the learning environment means changing everything about the traditional classroom structure. Many of these changes have been discussed previously -- a functional curriculum -- which makes learning more meaningful. Nontraditional classrooms, particularly for dropout youth, many mean paying special attention to where the building is located for ease of access as well as for the mental connotations a building on the grounds of the local high school may conjure up.

The second structure which can be used to deliver educational instruction is at the worksite. This strategy can take on a variety of forms: a room provided by the employer which youth use during their work day and is staffed (taught) by the employer's personnel; a mobile classroom where teachers and materials come to the worksite to provide instruction; and learning which occurs at the same time a job function occurs--i.e. supervisors who can teach math functions while a cabinet is being built. Several key elements are crucial to the success of worksite training programs which teach basic skills.

- Work assignments that are real with pay for work
- Work discipline so that missing work or coming late has consequences
- Strong work supervision
- Understanding of work expectations and regular review

CONCLUSION

The nation no longer has a choice. Those most at risk of becoming chronically unemployed due to a lack of basic education skills and work skills are those to whom our economic future falls. Many youth are not learning what they need to know to function in a changing labor market, as well as in daily life, through traditional school structures. Community institutions, particularly the schools, must be reshaped to meet the needs of those most at-risk.

Schools must treat these youth in an individualized fashion, addressing differences in learning styles and adapting nontraditional instructional methodologies which address individual needs. Smaller student/teacher ratios must be mandated to insure one to one interaction. Many youth who are identified as at risk because of basic skills deficiencies also face serious challenges in being able to participate in school or training, such as the need for child care. Support services which create the opportunity to participate must be in place, either within the community or within the educational environment. The full curriculum in schools, both that which is taught directly and that which is indirect -- such as discipline policies -- should teach youth to analyze and solve problems, rather than to respond en masse to bells and group instruction.

The challenge placed before us is to insure that youth have the skills they need to become employed and that the community institutions responsible for assisting youth keep the focus on those most at risk of chronic unemployment. Nothing less than restructuring may be necessary to meet the challenge. No matter how committed and talented individuals within an organization may be, structural change is rarely easy nor does it arrive quickly. The federal government has a responsibility to provide incentives, economic, legislative or otherwise, which promote the development of strategies designed to assist the most at risk youth. With the focus on developing consistent strategies for service delivery, instead of concern for institutional survival, the needs of youth and their economic future stand a chance. Otherwise a generation of potential workers may be lost. Thank you.

Representative SCHEUER. The bells have gone off. And I have to leave here in 8 minutes.

And we absolutely must be out of this room at 1 o'clock. So I'm going to ask Ms. Gueron and Mr. Parnell to take 4 minutes each, and then we will rely on Uncle Sam's mail to get some questions to you and then get your answers.

I do apologize profoundly from the bottom of my heart for the delay in getting going this morning.

Ms. Gueron, please proceed.

STATEMENT OF JUDITH M. GUERON, PRESIDENT, MANPOWER DEMONSTRATION RESEARCH CORP.

Ms. GUERON. Thank you. I'm pleased to have the opporutnity to be here, and I will focus on two groups: young high school dropouts and women on welfare. The first is really the group that we hear about most from the business community and that we should focus on if we care about young people.

What I will mention briefly is some concerns about the success of the current employment and training system, in fact, in reaching this group. Research suggests that there are several lessons that we can draw.

First, that work experience programs alone are probably not going to be enough for disadvantaged high school dropouts, and that simple job search programs may make short-term differences, but will not make long-term differences.

We do, however, have positive research from the Job Corps program, which shows that that program can increase probability of receiving a high school diploma and the rate of subsequent employment.

Building on that research at MDRC, we have put in place a demonstration called Job Start to see whether, in a nonresidential setting, we can replicate some of the results from the Job Corps.

That program is designed to target the most at-risk youth: economically disadvantaged youth reading below the eighth grade level, and it provides them with basic educational instruction, occupation skills, training and support services.

We don't yet know whether that program works, but watching its implementation in the JTPA system suggests some issues about the ability of that system to serve the most disadvantaged—and I will mention those briefly.

First, we find that the limitations on administrative costs and some of the paperwork requirements make it difficult to reach out to and attract and retain those youth.

Also, the lack of availability of support payments in stipends make it difficult to keep in the program individuals who do not have alternative support.

Finally, the way performance standards have been applied at the local, State and Federal level in JTPA have tended to push the system to reward programs that produce a high number of placements at low cost.

Our work also shows the local SDA's frequently tend to place more value on high placement rates than other positive terminations for youths—for example, skill gains—and frequently don't differentiate between outcomes for youth and adults.

All of these suggest that the training system in this country has a long way to go to adequately serve this group.

The second group I will mention briefly are women on welfare. And here we know a lot more and have learned a great deal over the past 10 years. We know that long-term work experience programs can make a difference, that voluntary job search programs can make a difference, and with less rigorous information, that on-the-job training and training programs can be effective.

More recently we have learned a great deal from State efforts started in 1981 to reform the WIN Program using programs run by approaches authorized in the Omnibus Budget Reconciliation Act.

This has shown that a variety of programs can benefit both welfare recipients and taxpayers, lead to increases in employment and earnings and reductions in welfare dependency.

These programs have been studied rigorously, and it is important to understand that they have been implemented in a period of sharply reduced funding. They are not really training programs.

What we have so far in the States is primarily job search and work experience or workfare programs that have not been work programs, but not done a great deal about skills training either.

So that leaves many questions unanswered. But we have learned that welfare employment programs are more effective for the more disadvantaged in terms of prior employment than for those with recent work histories who can find jobs on their own and don't benefit as much from services.

Second, the finding suggests that while the programs that States have been implementing increased employment and earnings, they are not likely to allay employers' concerns about skills gaps and basic skills because they have been relatively low cost and not intensive.

We do see more recently in a number of States efforts to experiment with broadening the array of services and introducing, in particular, more educational and remediation activities. And it will be very important to find out whether those programs work.

Representative SCHEUER. Thank you very much.

[The prepared statement of Ms. Gueron follows:]

PREPARED STATEMENT OF JUDITH M. GUERON

Good morning. I am Judith Gueron, President of the Manpower Demonstration Research Corporation, and I am pleased to have this opportunity to talk with you about some of the lessons we have learned about training programs for the hard-core unemployed. I would like to focus my remarks on two groups in particular: young high school dropouts and female welfare recipients.

For over ten years, MDRC has tried to answer the problem you are interested in today: What kinds of programs are effective in helping young people and adults who are economically disadvantaged and lack basic skills make a successful transition into the labor force? Much has been learned, but many questions still remain. We hope to learn more from our on-going research in these areas.

Let me begin by talking about high-risk youths. The business community is particularly concerned that as we begin the next decade, young people entering the labor force will not have the skills to adapt to the rapidly changing, increasingly competitive marketplace. If you share these concerns, there is one group in particular that should claim your attention. Many recent studies have documented that chronic joblessness among youths is concentrated primarily in a relatively small segment of the teen population: youths who have dropped out of high school, and who come from poor, minority families. Lacking the basic education and work skills required for most entry level jobs, these young people are at a particular disadvantage in the labor market. Without intervention, their skill deficiencies will continue to limit their economic progress even if the economy as a whole improves. Recent evidence, moreover, links the problem of low academic skills not only to youth employment problems, but also to the decline in the productivity growth of the nation's workforce.

The importance of serving dropouts has been getting more attention from policy makers in recent years. Neverthless, recent trends in employment and training policy have heightened concerns that the most-at-risk groups are not receiving the services they need.

What We've Learned: The Research Record

Serving young high school dropouts has historically presented major operational challenges for service deliverers in the employment and training system. The record of youth programs under CETA -- the predecesssor of JTPA -- shows that many programs designed specifically to serve dropouts had difficulty in recruiting youths and/or keeping them in the program. Programs designed to serve both in-school and out-of-school youths encountered many of the same problems and ended up serving mostly in-school youths.

As a result of these implementation problems, as well as weaknesses in the evaluation designs of a number of programs, the research record on what works for this group of the hard-core disadvantaged is not very strong. But several lessons have emerged on the effectiveness of a variety of program models and point the way for future action.

o Programs that provide only work experience to very disadvantaged high school dropouts do not appear to lead to positive employment effects over the long term.

The National Supported Work Demonstration, operated between 1975 and 1979, provided a year of paid work experience; the subsidized jobs were closely supervised, and the program was structured to provide peer support and graduated stress. A rigorous evaluation by MDRC found that although Supported Work proved successful with other hard-core groups such as long-term welfare recipients, it did not lead to enduring effects on the earnings and employment of young dropouts, most of whom had delinquency records.

- Short-term interventions which primarily provide job search and other placement assistance for dropouts have modest short-term effects which do not continue over time.

A short-term pre-employment skills and placement program for dropouts was found to have statistically significant effects on weekly earnings nine months after enrollment in an evaluation conducted by Public/Private Ventures; these findings held up at 14 months, but a more rigorous analysis of follow-up data revealed no continuing earnings effects.

- A multiple service, comprehensive remediation and skills training program for dropouts has shown more positive employment effects.

A major study of the Job Corps, an intensive remediation and skills training program in a residential setting, found that program participation increased employment and earnings and the probability of receiving a high school diploma or GED. These findings are particularly important given the serious deprivation of the typical Job Corps enrollee. It is unknown, however, whether the residential aspect or the mix of program components accounts for the effectiveness of the model.

The JOBSTART Demonstration

Building on this research record, MDRC developed a new demonstration -- called JOBSTART -- to test the effectiveness of an approach based on the Job Corps model, but operated in a non-residential setting. An important aspect of the demonstration is that it is being operated as part of the regular JTPA delivery system and the bulk of the operating funds have been provided through state and local JTPA agencies. The evaluation currently underway will thus allow us to draw some lessons about serving dropouts within the JTPA system.

The JOBSTART eligibility criteria were designed to target the most-at-risk youths. To be enrolled, applicants must be between the ages of 17 and 21, high school dropouts reading below the eighth grade level, and economically disadvantaged, as defined by JTPA.

The JOBSTART program model consists of the following elements:

- A minimum of 200 hours in basic education instruction using an individualized, self-paced, competency-based curriculum.
- A minimum of 500 hours of occupational skills training in occupational areas where job growth is evident or expected.
- Support services on an as-needed basis, including monetary incentive payments, individual and group counseling, work readiness and life skills training, childcare and transportation assistance.
- Job placement assistance.

JOBSTART is currently being operated as a demonstration in 13 sites across the country. The sites represent a variety of training institutions, including community-based organizations, adult vocational schools, and the non-residential component of Job Corps centers. In most sites the JOBSTART education and training components are taught concurrently, but in others, participants receive the educational instruction before entering skills training courses.

The JOBSTART evaluation, which MDRC is conducting, consists of a three-part study: an impact analysis, a benefit-cost study, and an implementation analysis. The impact analysis uses a random assignment experimental design, the most powerful methodology for yielding reliable evidence. It will measure JOBSTART's impact on the earnings, employment, welfare dependency, crime and family status of the enrollees, based on two years of follow-up data. Random assignment began at the first sites in August 1985, and will continue at some through the end of this year.

It is far too early to talk about any results from the impact study, but I can address issues relating to the operation of a program like this within the JTPA system. They suggest lessons of broader relevance for understanding some of the obstacles to serving high-risk youths in JTPA.

Operating JOBSTART within JTPA

On the whole, the JOBSTART experience suggests that there is opportunity to serve very disadvantaged young dropouts within the JTPA system, but to do so requires unusual commitment on the part of local and state JTPA staff as well as training vendors. Bear in mind that a number of studies indicate that the JTPA system has been serving a population that is more educationally advantaged than the eligible population as a whole, and that young dropouts are not a service priority in many SDAs. In addition, although the research record suggests that longer, more intensive services are needed for this group, the general trend in JTPA has been toward shorter, less costly training programs. MDRC's work on JOBSTART suggests a number of ways in which JTPA rules and practices can discourage local service providers from working with dropout youths. Let me briefly review some of them.

First, limitations on administrative costs make it difficult for many

JTPA agencies and training vendors to pay for recruiters. This means that they have to rely heavily on "walk-ins" to fill their classes. One of the things that has become very clear in JOBSTART is that enrolling large numbers of dropouts in training programs requires intensive effort by staff who must do recruiting "on the street" and not just from their offices.

Another practice that can make it hard for program operators to serve a large number of dropouts is the paperwork that is required for JTPA certification. We found in some of the JOBSTART sites that local practices were sometimes more stringent -- out of fear of audit exceptions -- than the JTPA legislation or federal regulations require. For example, in one location, youths were required to produce an original birth certificate; in another, staff had to fight to get permission to certify youths who were able to produce a parent's current pay stub which showed cumulative earnings for six months in lieu of requiring six separate pay stubs for the six month period. Such practices drag out the application process and discourage youths who do not have easy access to such documents from completing it.

Third, as numerous studies have shown, the availability of support services in the JTPA system is quite limited, due both to the prohibition against paying stipends and the restrictions on the percentage of funds that can be spent on support services. This, too, is likely to have an adverse effect on both recruitment and retention, since it means that participants will have to have some other means of support while they are enrolled in the program. In JOBSTART, these restrictions also made it difficult for sites to hire additional counseling staff or to provide financial incentives for good performance as an aid to retention.

Fourth, the way performance standards have been applied at the local, state and federal level in JTPA tends to push the system to reward programs that produce a high number of placements at a low cost. MDRC found that local SDAs frequently tended to place more value on high placement rates than on other positive terminations for youths, and frequently did not differentiate between outcomes for youths and adults when a contractor enrolled both. Further, SDAs were very concerned about keeping costs per participant low. In general, across the sites, there was an emphasis on -- and financial incentives for -- contractors and SDAs to "over perform," that is, to place more people at lower costs than stipulated in the contract. This practice gives program operators little incentive -- and considerable disincentives -- to work with the hardest-to-serve eligibles, such as young high school dropouts who are likely to require more support services and longer training before they are ready to enter the job market.

Fifth, regulations specifying that enrollees in JTPA-funded basic education programs who transition into skills training with other JTPA vendors cannot "count" as positive terminations make it more difficult for the system to enroll low readers and prepare them for skills training.

Finally, many SDAs now attempt to serve out-of-school youths by placing them in training programs -- particularly occupational training courses -- designed to serve adults. Unfortunately, such programs often lack the support services, counselling elements, and instructional strategies that are effective in helping youths master competencies and maintain good attendance in long-term training. In the JOBSTART demonstration, for example, sites which previously served mostly adults found it necessary to supplement their usual program offerings with additional support services, additional counseling staff and additional hours of basic education.

Although the bulk of the JOBSTART operating funds were provided through the JTPA system, most sites in the JOBSTART demonstration had to supplement their locally-awarded JTPA Title IIA funding with money available from the state-controlled JTPA set-asides for education programs ("8 percent funds") or incentive funding ("6 percent" funds), or from non-JTPA sources. In particular, additional funding was needed to hire staff to conduct recruitment, provide counselling or pay for enriched support services -- features that MDRC felt were vital to the implementation of the JOBSTART model, but which were frequently not part of the normal operating budget at the sites. Maintaining on-going programs by patching together small amounts from multiple funding sources is a difficult process for program operators -- time-consuming to procure, and complex to administer because of differing requirements on eligibility, program services, reporting and performance standards. In addition, such piecemeal funding strategies are subject to considerable uncertainty, fluctuating budget levels, and untimely delays, all of which can adversely affect service delivery.

Despite these difficulties, state and local JTPA agencies were receptive to JOBSTART in most of the 13 sites, and sometimes provided extra flexibility in the vendors' contracts or performance standards as well as extra funds. It should be noted, however, that in a number of cases, SDAs have been supportive of JOBSTART because it is a demonstration; whether the sites will be able to institutionalize the program and retain JTPA support remains to be seen.

Programs for AFDC Recipients

For AFDC recipients, the research record is more encouraging. A number of studies indicate that a variety of employment and training programs have had lasting success in raising employment and earnings levels for female heads of household on AFDC. Strategies as diverse as the Supported Work program mentioned earlier and voluntary job search programs have shown positive impacts that held up over a three-year follow-up period. The evaluation record from classroom occupational training and on-the-job training programs operated under CETA is less rigorous, but suggests that AFDC recipients also benefit from these strategies. The Supported Work experience is particularly noteworthy since the program targeted long-term recipients; on average, members of the research sample had spent over eight years on AFDC.

More recent studies focus on state initiatives launched since 1981. In the Omnibus Budget Reconciliation Act of 1981, Congress gave states the opportunity to experiment with a variety of employment approaches for AFDC recipients. We can speak with confidence about the results of those experiments because a number of states submitted their initiatives to a rigorous evaluation using control groups. MDRC conducted these evaluations in its multi-state Demonstration of State Work/Welfare Initiatives, using funding provided by the Ford Foundation and the states. My remarks today will be based on the findings in the five studies completed and released to date: these include programs operated in San Diego, California; Baltimore, Maryland; two counties in Arkansas; Virginia; and West Virginia. Our study of the Cook County, Illinois program will be released later this year, and final studies in New Jersey and Maine will be available next year.

As a result of this research, we have learned that a variety of employment programs can benefit both welfare recipients and taxpayers. They can lead to increases in earnings and employment and decreases in welfare dependency. Across the states in the MDRC study, employment rates for the sample studied rose, on average, between 3 and 8 percentage points, which translates into earnings gains of between 8 and 37 percent. At the same time, welfare receipt fell by smaller amounts, up to 11 percent. It is important to note that these findings are averaged over all eligibles studied, including those who did not participate or get on welfare. The averages also include non-earners as well as earners. From the budget perspective, too, the investment of public funds in the programs paid off: within a five year period, the costs were matched or exceeded by the increases in taxes paid and reductions in transfer payments.

With one exception, the programs studied by MDRC were run by state or local welfare agencies, sometimes in conjunction with JTPA or other agencies. For the most part the programs served only those AFDC applicants or recipients whose youngest child was at least six years old. Some locations served all women in this group; others served only a subset. Within these parameters, staff made an effort to work with all eligibles, not just with those clients who seemed the most readily employable. The programs were mandatory, meaning that if eligibles failed to participate without good cause, their welfare grants could be reduced. The mandatory aspect makes them somewhat different from training programs run through the JTPA system, where enrollees volunteer to participate.

It is important to stress that the programs studied by MDRC -- at a time when federal funding for welfare employment programs had been substantially reduced -- are not really training programs. With a few exceptions, they did not provide the opportunity for participants to be instructed in specific occupational skills, or to improve deficiencies in basic English or math skills. The most common strategy was job search, either by itself or in combination with unpaid and, usually, part-time work experience. A notable exception was the program run in Baltimore, which provided a range of education and training opportunities (including job search). Thus, for the most part, the programs concentrated on teaching AFDC recipients how to look for a job and developing good work habits and attitudes, all in a relatively short period of time, and at a relatively low cost, ranging from $165 to $1,000 per eligible. Typically, group job search lasted from two to four weeks, and work experience lasted 13 weeks. (West Virginia was an important exception; here, participants were expected to continue in unpaid work slots as long as they remained on welfare.) MDRC's interviews with program participants and their supervisors in five states indicated that although the work experience positions were not "make work" assignments, they were not structured to teach people substantive skills. Instead, they were mostly entry level positions that used the skills participants already had.

Some clear lessons have emerged from this research:

o First, a number of different program designs can be effective in raising earnings and employment and reducing welfare dependency among the AFDC caseload; there is no single program model that should at this point be recommended for national replication.

o Second, these welfare employment programs had their smallest effects on the most job-ready recipients, people who do relatively well without special services. This suggests that we should reverse the tendency to concentrate services on the most readily employable recipients. Instead, administrators should be encouraged to serve the more difficult to place, including those who have been on welfare for a long time and lack a recent work history.

- Third, the findings suggest that while these sorts of programs are successful in increasing the employment and earnings of welfare recipients, they are not likely to allay employers' concerns about the skills gaps or the lack of basic skills in the emerging labor force. Nor should we look to these relatively low-cost, low intensity programs, by themselves, to solve the problem of poverty or dependency.

As noted, few of these programs attempted to offer substantive skills training or educational remediation. Although more participants were working because they participated in the programs, many did not get jobs and remained on welfare after fulfilling program requirements. Moreover, most of the women who did get jobs were working, at least initially, in low-paying, entry level positions.

The programs that MDRC studied are typical of early state responses to the flexibility offered in OBRA, during a period of serious funding constraints. Since then, a few states have begun to experiment with programs that provide a broader array of more costly services, often placing greater emphasis on training and education opportunities instead of expecting the whole caseload to participate in job search and/or work experience. Unfortunately, we don't yet know whether these programs will produce impacts greater than those seen in the first round of welfare employment initiatives, or whether they will be more successful in assisting groups for whom the job search/work experience approaches did not have much benefit.

These more intensive strategies are promising approaches worth testing. Evidence from the longer-term follow-up on the Baltimore program, for example, suggests that education and training may have delayed but increasing payoffs. It also appears that although the low-cost programs are of benefit to longer-term recipients, there may be a threshold effect: more intensive services may be required if programs are to reach the multi-problem, longest-term recipients.

Thus, despite the strength of the recent research record on welfare employment programs, many questions remain. Of particular interest to this committee are such issues as: Would employment and earnings rise by greater amounts if welfare agencies provided basic education or occupational skills training to a larger proportion of their caseload? Would the increased costs of these programs be offset by the benefits accruing from increased employment? What groups of AFDC recipients would benefit the most from these programs? What strategies are most effective for teen mothers? Information is also needed about the scale at which more comprehensive programs can be operated.

Conclusion

In conclusion, let me make the following observations about training programs for the hard-core disadvantaged, young dropouts as well as adult AFDC recipients, based on MDRC's research:

- There is a continued need for creative approaches and flexibility in program design. Experimentation should be encouraged, but it should be accompanied by rigorous evaluation, so we can continue to add to the knowledge base for action.
- Performance standards should reward programs for working with the more disadvantaged, and not encourage them to serve the most readily employable. Performance measures should also allow operators to work with the more disadvantaged for longer periods of time, and not force programs into using only short-term approaches.

Representative SCHEUER. Mr. Parnell, I deeply apologize. I have to leave in exactly 2 minutes to make that rollcall vote. We will have questions for you by mail.

I offer you my most profound apologies.

STATEMENT OF DALE PARNELL, PRESIDENT, AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

Mr. PARNELL. Mr. Chairman, thank you very much.

There is an old Chinese proverb that goes something like this, that:

It is unwise to attempt to leap the chasm in two bounds.

And so I will try to leap this chasm in one bound.

I join the testimony of Jim Kadamus and Steve Trachtenberg.

They represented my viewpoints very well. And there are many things that are working in community and technical colleges across this country. I will relay one of them to you.

First of all, you asked about United Auto Workers. There is a lot going on with regard to partnerships between United Auto Workers, Ford Motor Co., General Motors, and community colleges. And we have some great success stories that we can share with you.

Second, a lot of college faculty think that their students were dropped into the college by way of the stork. And we find that that is not true. And so we are reaching out to high schools.

We have developed a program that is really working called a Tech-Prep/Associate Degree Program, whereby grades 11, 12 and 13 and 14 are combined, not organically, but in terms of program structure.

Students know where they start. They know what they have to do to move along in the way of math, science, and technical education. And complete with an associate degree.

An associate degree is becoming more popular with employers across the country because it is a quality assurance issue that the students can read, write, and compute and be technically competent.

And so there are some good things that are happening out there. I wish the Federal Government could get its act together in the sense of trying to have a national human resource development strategy.

Every Cabinet officer has a little bit of human resource development money. The left hand often doesn't know what the right hand is doing. That would be very helpful.

But, from the grassroots up, I can tell you there are many good things happening.

Thank you.

[The prepared statement of Mr. Parnell follows:]

PREPARED STATEMENT OF DALE PARNELL

Mr. Chairman, members of the subcommittee, and distinguished guests, my name is Dale Parnell, president of the American Association of Community and Junior Colleges. I am speaking on behalf of our organization, which represents more than 1,200 community, junior, and technical colleges throughout the nation, all committed to help educate and train the American work force. We appreciate the opportunity to appear before you to discuss what may be the most important subject facing this nation: the quality of its workers.

I believe Congress must work with education, business and labor to establish the goal of developing the best, most productive workforce in the world. How do we do that? We must recognize who our workers of the future will be, give them recognition and their education some priority, and put together an educational system that meets both their needs and the needs of our nation.

America's educational system is undergoing constant, necessary reform. Lead by the clarion call to the American people, "A Nation At Risk," the report from the National Commission on Excellence in Education, at least fifteen major reform reports and a host of others have been issued over the past three years calling for substantive changes, with many familiar recommendations: better teachers, a return to basics, greater accountability, more time on tasks, better discipline, and so on.

As important as these reports have been, they exhibit some glaring omissions and blind spots that hold considerable significance for community, technical, and junior colleges. These include:

o failure to recognize that three out of four high school graduates probably will not earn a baccalaureate degree;

o little discussion about how to make winners out of ordinary students;

o little emphasis on continuity in learning;

o limited attention given to the great range of individual differences among the school population, particularly the one out of four students who fails to complete high school;

o lack of participation by community, technical, and junior college personnel in these discussions, despite the fact that 55 percent of all entering freshmen begin their college careers in one of our colleges.

If a truly competitive workforce is to become a reality for millions of Americans, the truth is that that higher and more comprehensive skills must be developed. More sophisticated manual as well as conceptual skills will be in demand, and this worker cohort will be pushed consistently to handle a broader range of work requirements. Tasks once reserved for baccalaureate-degree or advanced degree performers will be assumed by those with fewer years of education and training, and all workers will find it essential to learn throughout their careers in order to remain useful.

In order to prepare the worker of tomorrow, and to better serve the high school student, we need to address the points often neglected in the reform reports. The American Association of Community and Junior Colleges proposes the development of 2+2 tech-prep/associate degree programs as a way to provide educational excellence and quality programs to the two middle quartiles of a typical high school student body.

The academic and vocational desert of American education, I believe, is the high school general education program. Too many young people are receiving an unfocused general education which relates to nothing, leads to nothing, and prepares for nothing. It certainly does little to promote continuity in learning or to build personal confidence and self-esteem.

The 2+2 tech-prep/associate degree allows the average or ordinary student to see why they are learning, how this learning connects with other learning, and where this learning relates to real life. This four-year educational program begins in the junior year of high school and continues through two years at the community, technical, or junior college. It includes a common core of learning, including communications skills, mathematics, and science, along with technical education. Wherever possible, the common core of learning is linked with real-life examples emanating from the careers-education emphasis.

The tech-prep/associate degree does not replace college prep/baccalaureate degree programs, but is offered as another structured alternative for students. The program calls for a cooperative, collaborative effort between secondary school and community college leaders. Substantive and sustained discussions over curriculum, assessment, and procedures must take place between these leaders. The bottom-line issue is simple, yet important: what is best for the student?

As the high school graduation rate declines and the literacy competency of high school graduates is increasingly questioned, we in the community, technical, and junior college movement have decided we can no longer sit back and point our finger in blame. We must join our colleagues in the secondary schools to help develop and implement an educational program which provides structure, substance, focus, and continuity. The 2+2 program can do this--and it is beginning to take hold across the country.

I would describe the 2+2 tech-prep/associate degree program as a liberal arts/technical education program. It emphasizes the importance of solid competency in the liberal arts and basic education fields.

The 2+2 tech-prep/associate degree program provides a dramatic model for educators wishing to avoid slippage and loss of continuity in learning. Most important, it brings program structure and substance to the ordinary student--that student who will not likely obtain the baccalaureate degree.

Many benefits will follow. For example, students will develop sound basic skills, and will obtain first-rate technical education. High schools will motivate more students and perhaps lose fewer students because they can see a future--a "why" for their education. Colleges will gain better prepared high school graduates. Employers will gain a better prepared employees to work in a wide-technology society.

Excellence in education is inevitably linked to the larger issue of human resources development in our country. If we do not know how to seek the best in all our citizens and to fully utilize our human resources, we become a wasteful society regardless of what we do elsewhere. We can make winners out of ordinary and average students, if we believe it is our duty to provide them the educational means to accomplish success in their lives as workers and as lifelong learners.

What can Congress do, Mr. Chairman? There are several ways to assist community, technical, and junior colleges in their drive to help develop the most competitive and productive workforce in the world.

o Fully fund the Pell Grant program at the level provided for in the Higher Education Act. Congress has continually rejected proposals to cut funding for this and for other student financial aid programs, and deserves our gratitude. This strong commitment to access must not be weakened.

o Extend Tax Code Section 127 (Employee Educational Assistance). Nothing can be more important to building the skill base the U.S. economy needs to regain its competitive edge than helping working Americans gain the skills that will keep them employed. Section 127 works to keep America working by recognizing that 85 percent of those who will comprise the workforce in the year 2000 are on the job today. The dividends that society, the economy and the workforce realize from Section 127 benefits are often compared to those of the GI Bill's, yet they are realized at only a fraction of the federal investment in military and in veteran's education. Demise of Section 127 would be a disincentive to American competitiveness. It is not a fringe benefit for corporate executives. Data shows that more than 70 percent of the workers drawing Section 127 incentives earn less than $30,000 a year. The bills that would keep Section 127 in the tax code, H.R. 1692 and S. 39, are cosponsored by a bipartisan House majority--243 members as of this week--and 32 Senators. As Sen. Daniel Patrick Moynihan, author of S. 39, pointed out in a recent "Dear Colleague" letter, Congress "can take a large step toward making our workforce more competitive, while making the tax code simpler, by acting to make Section 127 permanent."

o Allow states the flexibility to apply Carl Perkins Vocational Education Act money to the skill needs that most benefit the economy. Congress will soon be moving into the reauthorization of the Perkins Act. The Perkins Act would be a much stronger plank of competitiveness , were it more responsive to the nation's skill needs. The Perkins Act should in fact direct states to develop new and vital technical education programs, using the tech-prep/associate degree program as a model.

In summary, we believe that technical education and the tech-prep/associate degree concept deserve equal rank in national competitiveness policy alongside those building blocks already in place: Pell Grants, employees educational assistance, the Montgomery GI Bill, and scientific research and development.

Mr. Chairman, I am honored to have had the opportunity to share these thoughts with you. With your continued leadership and support, America's 1,200 community, technical, and junior colleges can become an even more important vehicle through which this country's citizens can meet the challenges facing its workforce.

Representative **Scheuer**. Thank you for helping us end on a high note. I am very grateful to this panel. I apologize to all of you for the late start. It was a wonderful panel.

Thank you so much.

[Whereupon, at 1:01 p.m., the subcommittee adjourned, subject to the call of the Chair.]

[The following written questions and answers, together with a letter, with an enclosed article, from Glenn C. Loury, professor of political economy, Harvard University, were subsequently supplied for the record:]

RESPONSE OF JOAN L. WILLS TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

National Governors' Association

John H. Sununu
Governor of New Hampshire
Chairman

Raymond C. Scheppach
Executive Director

December 8, 1987

Ms. Deborah Matz
Economist
Joint Economic Committee
1537 Longworth House Office Building
Washington, D.C. 20515

Dear Debbie,

The answers to your questions, or lack thereof, follow.

Question (1): Since Private Industry Councils (PIC's) already exist, why can't they be channeled to expand their scope and duplicate the Boston Compact, for example?

Answer: If your question implies changing the federal legislation in some way, the answer is don't. The reason for this is multifaceted. The legislation appropriately allows each community to use the PIC in a way that makes sense for them. The federal law does not dictate nor limit the scope of any PIC. Instead, it provides the framework for the PIC's to evolve into a community Board of Directors, so to speak, for all employment and training related activities. Therefore, it artfully does not tread on the local and state governments' already established governance structures of schools, community colleges, other post-secondary institutions, welfare programs, city and county general structures, et al. They can, and are, evolving into goal setters and monitors of success (and failures) of all the providers of service, but we are not there yet. Enclosed is an article written by Joe Fischer in England, that better describes what I am trying to say.

The genius of the JTPA/PIC concept is exercising itself in Boston. The Boston Compact, while very important for one part of the at-risk population youth, is but one concern of the local PIC; they also have to be concerned about welfare recipients, dislocated workers, the older workers and whomever else they may have identified as a target group. The local JTPA/PIC, therefore, was able to channel its youth program initiatives into the Compact. However, has other channels to work with the state in the ET Choices program, for example, for welfare recipients and yet another strand of activities and actors to resolve the problems of dislocated workers. It is at the PIC level that these strands can come together in the best case scenario to eventually make a coherent community response to the market needs of employers and individual clients alike.

If the question simply means how can the federal government help Boston share its experiences with other communities, then the answer is that in this case this is already underway through a grant to the National Alliance of Business and the Boston Compact. I frankly can't remember how many communities the concept is being tested on now, but Bill Kolberg at 289-2800 can answer the details about this experiment. This type of technology transfer activity is not only appropriate, but we need more of it.

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In short, therefore, the issue is not to legally expand their scope--sufficient, legislative scope exists. The task is more mundane but vitally important in helping them become the Board of Directors, and also sharing with them and others the technologies of success.

Question (2): Higher Order Thinking Skills, or HOTS, as I just heard it called.

Answer: Unfortunately, there is, at best, only anecdotal information. John Bishop has done the most organized work in this area, that I am aware of, and I believe ASTD should be doing some additional work in the next year or so as a result of a contract with the Department of Labor, so you may want to check with Tony.

Question (3): How do you find and motivate the hardcore unemployed?

Answer: Unfortunately, the answer must be based, in part, concerning what is realistic given resources. There is not enough money to aggressively search out substantial numbers. As you are aware, the appropriation limits on JTPA, WIN, and to some extent, ABE, don't make it very realistic to push too hard at this point in time. More can and should be done, however, I have heard it said, for example, that many of the literacy projects that have been promoted through television and the popular press have more volunteers than they have people seeking tutoring. This is not particularly surprising if a local community has not worked with indigenous community-based organizations, including the churches and unions in targeted neighborhoods to reach out to at least try and motivate those individuals they are more likely to come in contact with than a public agency such as a school.

Government has it a ready pipeline for sometime to come for many who need motivation and access, and that is through the welfare system, including more than one member of a particular family. Can we seriously talk about identifying other target populations when we currently only serve 1.4% of those individuals below the official poverty line through the WIN program? Hopefully this helps explain why Governor Clinton and others refuse to give up on welfare reform.

There is a bully pulpit function that needs to be used to reach all of those who are in need of skill training or retraining. We do need a public service announcement strategy, so to speak, that says it is o.k. to seek help. There is now sufficient evidence regarding the fear, and for some, the grieving process that includes denial of job loss for a wide range of individuals. A portion of the drug users, those with criminal records, young men hanging around the street corner, long-term welfare recipients, the homeless, whomever one chooses to define as a part of the hard core unemployed, could also respond to a public service strategy. Caution needs to be exercised that such a strategy does not become pollyannish, nor a substitute for needed funding or services. Our citizens need to be less afraid of the realities of change. One of the roles of all political leaders should be to send out the message that we can adjust, it is not the fault of the single individual.

Question (4): Who should pay when literacy is the problem--public or private ?

Answer: Motorola has done the best comparative analysis of the difference of training cost between Japanese and their own companies, cost per worker. Toyota spends 47 cents per worker while Motorola spends $200 per worker in this country. These types of costs represent an unacceptable drag on the economic vitality of industry. Such figures provide, in sharp relief, our problem. If we continue to operate on the belief that it is predominately the public responsibility to provide the emerging and current workforce with the basic educational base to participate in the workforce, then do we have a choice but to recognize we have to play catch up for those who are already in the workforce but inadequately prepared for the jobs of today, and those that will emerge in the near future? I have heard no one argue that industry should bear the cost of basic education. Illiteracy is clearly a reflection of poor educational preparation.

The challenge is, how do we reconstruct the way we allocate funds to assure we are not paying for firm specific training that is not appropriate for public subsidy? There are no easy answers but there are some steps that can be taken to minimize the problems. One way is to create a more coherent system of public training. A major portion of this burden rests squarely on the shoulders of state government because they are the only level of government that controls the public education infrastructure, and have some responsibilities as an administrative agent of the federal government for almost all of the federal government programs in this arena.

The federal government can provide critical support by simply recognizing this responsibility and constructing the intergovernmental grant-in-aid programs in such a way that they hold the states accountable to perform this task. This alone will not be enough, however, federal programs need to focus on the needs of the workplace as a matter of priority--most currently do not. Allowable activities in the grant programs need to be driven by negotiated arrangements that management and labor representatives agree upon at site. The public agent responsible for negotiating the site-specific program should have authority to commit resources from multiple funding sources such as ABE, JTPA, WIN, and voc ed, as well as state-funded resources. The last thing we need is to perpetuate different public-funded program agents involved in turf building, offering more subsidy than is essential.

I am not sure this brief answer helps, but it is driven by our strong belief that it is essential to reconstruct our systems, not just to add another new quick fix, high profile program that is unconnected.

If there is anything more that I can help with, let me know.

Sincerely,

Joan

Joan L. Wills, Director
Center for Policy Research

Enclosure

From NAB...

"The Maturing of New England PICs"

By Joseph Fischer, Vice President, National Alliance of Business

Joseph Fischer

U. S. Department of Labor reports indicate that the JTPA system in New England leads all other regions of the country in terms of the established standard performance indicators. Also, as the National Commission for Employment Policy has reported: "...much of the stigma that attended earlier federal training programs has disappeared as local business representatives have become actively involved in planning and overseeing local training activities."

There is no doubt that this achievement is due in large measure to the vigorous efforts of our Private Industry Councils over the past four years.

Yet, as we at NAB travel the New England JTPA circuit and are otherwise in dialogue with PIC members at meetings and conferences, we detect the first signs of a subtle malaise in many PICs, particularly among their business sector members.

We hear, more frequently, than in the past, of problems in individual SDAs with respect to consistent attendance at Council meetings by business representatives. As the terms of service of Council members routinely expire, we note increasing difficulties in replacing business members with persons of equivalent stature in the community.

Although such circumstances are not wide spread in the New England employment and training systems, we believe they are a matter of concern. We also believe that the basic cause of this situation is rooted in an inevitable evolution of the role of PICs in our maturing JTPA system.

To understand this evolution, one needs to look back on the circumstances which existed back in 1983 when the JTPA system was created. At that time, the new PICs were inundated with publicity about the weaknesses of the CETA system which they were replacing. They were led to believe that the CETA system was riddled with inefficiency and ineffectiveness—if not corruption.

Many of us hold the view that much of this criticism was unjustified. Nevertheless, that is what the PICs were told—and there were few voices offering dissent.

So the PICs acted accordingly. They took on an operational, supervisory task.

Many PICs defined their role as one akin to that of a Board of *Supervisors*. I use the term as it is often used in county or town government where such a citizen's board actually provides hands-on line management for a government operation—the Public Works and Highways Department, for example.

The original PICs reviewed existing organization structures and program operations in explicit detail. Where they found need for change, whether on a grand scale or on a minor one, they effected it. Where they found systems that were working well, they did the smart management thing—they left them alone.

In the overwhelming number of cases, the PICs did this operational job very well. Over the past four years, the PICs have established administrative organizations appropriate to their SDAs; installed or continued management staffs in whom they have confidence; and insured that program activities are in line with both client characteristics and local labor market.

For most SDAs, the *operations job is done*.

In a sense, the cause of discontent now arising in PICs is a reaction to that accomplishment.

Some PIC members are beginning to feel that they are not as needed as in the past—that most of their Council meetings are consumed by a detailed yet routine review (and then most automatic approval) of the recommendations of their management staffs—that such activities are not an effective or personally stimulating use of their time.

We at NAB think that such feeling could represent a serious problem for the JTPA system. The fact is the PICs are needed, and seriously needed—to insure that their SDAs stay on the right track; to help with the inevitable, unexpected major problems and opportunities which will occur; to take a leadership role in addressing the base causes of poverty in their communities.

How then can we overcome these emerging negative feelings? Part of the remedy is to encourage PICs to move forward from their past functions as a Board of Supervisors to a broader and more comprehensive role as a true *Board of Directors*.

We believe that most PICs should remove themselves from day to day management affairs, from exhaustive reviews of subcontractor proposals and from detailed approvals of pre-planned operating expenditures. Instead we feel that the PICs, as a Board of Directors, should carryout their statutory role "to provide policy guidance and program oversight", by concentrating on these basic functions:

- Formulate and install principles and policies which will govern the SDA administration's internal and external conduct toward individuals and organizations.
- Establish finite performance goals to be achieved by the SDA's operating management. Such goals should be based on "return-on-investment", i.e., impact on client well-being and local economic conditions.
- Review management performance against established goals and require any necessary corrective action. SDAs should have management reporting systems which allow this process to be accomplished with a minimum of paperwork and expenditure of Council members' time.
- Identify and lead the SDA organization into new areas of activity which will increase local return-on-investment.

In the present JTPA climate in New England, the latter function is perhaps most important of all.

Our traditional, client based employment and training operations are running well. However, there remain critical, deep-rooted employment related problems for a broad spectrum of Americans in need and for the nation's overall economic well being. These include education system improvement, welfare reform, worker retraining/skill upgrading and area economic development.

These are vital, complex fields of activity which merit the time, talent and energies of New England's business, education, labor and public institution leaders. They constitute an array of new, stimulating challenges for our maturing Private Industry Councils.

RESPONSE OF JAMES A. KADAMUS TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

Question 1 Relating to the possible expansion of the role of the Private Industry Councils

Although they are mandated under the Job Training Partnership Act, Private Industry Councils vary widely in the roles they play in coordinating training and working with the education system. Unlike the Boston Compact, where the program was initiated by chief executive officers of major corporations who are in a position to commit company time and resources, the majority of PICs have business representatives from smaller business who have limited time to devote to projects or representatives who are lower level staff persons working in public relations or personnel departments in larger corporations. When the Governor established the School and Business Alliance program in nine cities in New York State, we decided to give the cities the option of using PICs, using existing business and education organizations or forming their own Alliance Development Committees. This flexibility to choose locally is important in developing projects like the Boston Compact because it takes advantage of strong existing arrangements where they exist and gives localities the ability to form a new entity if existing arrangements are not in place. For example, the city of Rochester uses an existing Industrial Management Council in its School/Business Alliance Program while the city of Albany formed a new council which included the PIC chair as one member.

In New York State, we are forming regional training cabinets to bring together agencies involved with skills training for economic development to ensure better coordination of our efforts. We recognize the diversity of training providers and programs and each regional cabinet will have flexibility to adjust local membership to best reflect local situations. PICs will play a role as one member of the cabinet. This approach, again is based on the State setting expectations for coordination of training activities, but permitting local flexibility in developing organizational forums to meet those expectations. I believe, its a mistake for the state or Federal government to mandate the use of specific entities for coordination of local activities.

Question 2 Regarding programs successful at teaching trainees or students to think

As indicated in my testimony, New York State has recently restructured its vocational education program. Many of the new courses established will develop students' thinking skills in order to prepare them to be successful in the workplace. Home and Career Skills, a course which all junior high school students in New York must take, starts with the introduction of problem solving, decision making and management processes. Students then reinforce these skills through the application to a variety of life situations. Another junior high school required course is Introduction to Technology which challenges students to creatively solve problems through applications of technology. They explore technology in a way that creates an understanding of technological systems rather than the simple knowledge of a process. Several of the high school courses in occupational education build upon these foundation, decision making and problem making skills.

Over the last three years all schools in New York State have been implementing these new programs. Dozens of schools have exemplary programs in these areas. We could recommend specific schools to visit if you or any other staff would be interested in taking a closer look at these programs in operation.

Question 3 Regarding training for the hard core unemployed

Finding hardcore unemployed persons is not difficult. If a program maintains relationships with other agencies which deal regularly with this group, i.e. welfare offices, Employment Service, community based organizations, halfway houses, drug rehabilitation agencies, temporary employment agencies and public housing offices, that program will have an accessible pool of potential candidates. Most potential candidates will have experienced failure in former programs and will be hesitant to enroll. Most will also lack the basic skills to profit by job training and will lack the life skills and self-confidence to become successful trainees. Basic skills (including English-as-a-second language where necessary) are an absolute must. Yet, in order to maintain motivation, basic skills instruction must be clearly seen as instrumental to securing occupational training and employment. Some ways in which this may be accomplished follow:

- having students involved in the design of their own employability plans so that they understand the rationale for each stage.
- presentations by successful graduates of a basic skills-occupational training program, to show that it can be done.
- field visits by students involved in a basic skills stage to a 2nd stage component of the training plan, i.e. the occupational training component.
- provision of instruction in employability skills

- close monitoring of each student's progress along with supportive counseling to build a feeling of self-worth.
- counseling support to help deal with family, neighborhood, health, child care and transportation problems so as to allow the least possible distraction from education and training.
- dovetailing basic and occupational instruction as soon as it is feasible to do so. In this way the relevance of the instruction to securing a job is reinforced.

One strategy that the New York State Board of Regents has adopted which could also have an impact on the hard core unemployed is "Community Renewal," a concept which states that conditions of economic, educational, and social distress are interconnected. Furthermore, these conditions are concentrated in certain areas of New York State, typically in inner cities or isolated rural areas. Any approach that seeks to effectively deal with the symptoms of these conditions must comprehensively address all for the needs of the residents of these areas simultaneously. The approach is twofold: scarce funding must be targeted to the areas where conditions are most severe, and resources available in these communities must be coordinated so that residents can avail themselves of them easily without traveling all over or dealing with several different administrative organizations. The Regents have proposed that schools be used as community sites to perform this coordination function. Also coordinating educational programs with economic development programs targeted at distressed areas can bring together economic development and human resources development to reach related goals. Education and job readiness will not help the hardcore unemployed if there are no jobs with potential for advancement beyond the entry level, nor will economic development be effective in these communities if the residents are lacking in basic and employability skills to fill newly created positions.

Question 4 Regarding who should bear the cost of basic literacy training

Despite the great interest shown by business and industry in basic skills education, and the visibility of that interest, private sector monies still provide only about 5 to 7% of literacy resources nationally. Moreover, at least half of that comes from the collection efforts of volunteer agencies which rely as much on United Way support as they do on direct corporate donations. Clearly, literacy instruction in the United States is primarily a public venture. Indeed, one of the most striking outcomes of business involvement has been a greater realization by public policymakers of the problem of illiteracy and an increase in public moneys for literacy programs.

Workforce literacy, however, introduces some different variables. If a business or union is content to refer undereducated employees or potential employees to a nearby basic skills program, there is little rationale for the business or union to contribute to the support of the program unless all public funds are expended and new sections are to be set up for the business or union. However, if the business or union desires particular accommodations such as a special schedule, location of classes on site, or curriculum which is customized to serve the business or union's particular needs, some support by the business or union is certainly indicated. This often takes the form of donated space, counseling, or administrative services. Businesses and unions may subsidize programs by allowing employees to attend classes while still on paid time for part or all of the time of instruction, and in some cases may actually provide funds directly to support project activities.

RESPONSE OF LORI STRUMPF TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

CENTER FOR REMEDIATION DESIGN

A project of:
- *The U.S. Conference of Mayors*
- *The National Association of Private Industry Councils*
- *The National Job Training Partnership*
- *The National Alliance of Business*
- *The National Association of Counties*

1015 15th Street, NW • Suite 600 • Washington, DC 20015 • (202) 289-2952

December 8, 1987

Ms. Deborah Matz
Economist
Joint Economic Committee
1537 Longworth House Office Building
Washington, D.C. 20515

Dear Ms. Matz:

Thank you for your consideration of my testimony before the Joint Economic Committee. I would like to take this opportunity to answer the questions you recently sent.

(1) Many Private Industry Councils across the country have, in fact, taken on a broader mandate and begun to develop Education/Business Collaboration projects much like the Boston Compact. However, to develop these models effectively, almost every business leader throughout the community must be involved. This would include many businesses that are not represented on the PIC. Alot of time and energy on the part of the PIC is needed to facilitate business group meetings, business and education meetings, and business, education and other community player meetings as part of the process which leads to effective program models. Several barriers may inhibit this development. First, PICs are made up of volunteers who may have all they can do carrying out the mandates of JTPA. Second, many PICs, while interest in providing the catalyst for school reform don't know where to start. Much technical assistance is needed for these PICs to develop their role as "community conveners."

(2) I wish I could answer this question with a list of programs which teach students to think. However, the question is not easily answered because neither the education system nor the employment and training system have developed an effective way to assess deficiencies in problem solving and then to teach them through a specific curricula. The concept of 'problem solving' is probably the most difficult of all the employment related academic skills (reading comprehension, math computation, verbal communication, written communication, and problem solving) to describe.

Typically, the idea of problem solving addresses a group of interrelated skills which are utilized to deal with any new, complex, or abstract concept or problem. It includes the subskills of planning and organization, goal making, appropriate use of feedback, reasoning, set switching, information coordination, and concept learning. Some people suggest that there are two components in all

Project Directed by Strumpf Associates

problem solving activities: 1) understanding the problem, and 2) being able to solve it. Each of these subskills within the area of problem solving are difficult to define and/or assess. These skills also overlap greatly with those involved in other basic academic skill areas. There are many problem solving components in mathematical problems, as well as in much reading comprehension, and written communication. In fact, this area could be considered a subskill to all other basic skills, because without it, the other skills are only automatized responses without generality and flexibility in new situations or problems.

In summary, most joint education and employment programs are just beginning to develop curricula which addresses the students ability to use all knowledge in a multi-step, "real-life", fashion to solve a problem. Those programs which successfully transition youth from school to work and have a high retention rate of employment (not necessarily on the same job as initially placed) may be the best proxy for whether thinking, or problem solving skills, are being taught.

(3) In my opinion, identifying the adult hard core unemployed will take coordination between the Employment Service, the welfare system and the job training system. Those people known as discouraged workers — no longer on the unemployment roles because they have given up looking for work — need to be tracked, contacted and recruited for training. The longer they have not been receiving any benefits, are unemployed and not seeking employment — the more "hard core" they may be. The second type of hard core unemployed can be identified through the welfare system. People who have been on welfare for 26 months or longer ought to be referred to the job training system.

Motivating these individuals to participate in training once they are identified is a tough issue. It is important to note that some of the hard core unemployed will be self motivated. These are people that have fallen through the cracks of the employment service or welfare system. If they are informed of an opportunity that they had no knowledge of before and they see a job at the end of the line — that in and of itself will motivate them.

For the others, motivation can be provided through opportunities to earn and learn at the same time; support services that help to overcome access barriers to training such as transportation and child care; and seeing a real job at the end of the process that provides the same (and increasing) monetary benefits as all of their present government benefits. For instance, single women who are trained and placed at minimum wage jobs should be able to keep government provided health care benefits for their children (even as their AFDC is discontinued) until their salary or position includes health care. For many, jobs with little or no child health care benefits are a disincentive for working.

(4) I think the cost of increasing basic literacy among workers is both a public and private sector investment. For those people already working I think the private sector should bear most of the cost. Companies should be made aware that paying for an employee to learn to read, or to upgrade basic skills may be cheaper than paying the cost of firing, hiring and training a new employee. However, the public sector bears responsibility to provide effective literacy training to school age youth and to invest in community remediation services that the private sector can send employees to. The private sector can pay for the public service without having to make a substantial investment in an in-house program.

Sincerely,

Lori Strumpf (sg)

Lori Strumpf
Project Director

and President
Strumpf Associates

RESPONSE OF DALE PARNELL TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE SCHEUER

AACJC
American Association of
Community and Junior Colleges

Office of the President

December 7, 1987

Ms. Deborah Matz
Professional Staff Member
Joint Economic Committee
G01 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Ms. Matz:

Thank you for the opportunity to answer several questions resulting from the Joint Economic Hearing. Please feel free to contact Andrea Bolling, Frank Mensel, or me if you would like more information on any of the subjects.

Enclosed is my book, "The Neglected Majority", that may give you a few thoughts on this difficult subject. Also enclosed is a recent article by Don Petersen, Chief Executive Officer of the Ford Motor Company. We are seeing a new kind of economic development triangle emerging with employers at one point, reserach universities at another point, and community, technical, and junior colleges at the third point involved in technology transfer functions, and worker training and retraining functions, and in technical education.

Cordially,

Dale Parnell

Dale Parnell
President

DP:egd

Enclosures

cc: Frank Mensel
Andrea Bolling

National Center for Higher Education, One Dupont Circle N.W., Suite 410, Washington, D.C. 20036 (202)293-7050

Question: Since Private Industry Councils (PIC's) already exist because they are required as part of the Job Training Partnership Act, why can't they be channeled to expand their scope and duplicate the Boston Compact, for example?

Answer: JTPA could indeed expand the scope of its activity and duplicate the Boston Compact model. The one caution I have is that effectiveness of any delivery system is dependent upon the strength of the chemistry at the local level. I would be against legislating that JTPA must..., but instead use the regulatory process to maintain flexibility toward other combinations. In particular, the Boston Compact has at least one look-alike in one of our community colleges. Henry Ford Community College, Michigan, has offered a refund to any graduates who discover they are still deficient in basic skills. Indeed, all our colleges emphasize to students and employers that an associate degree is the only means of quality assurance in two-year postsecondary education. Anyone can take a few classes, but community colleges will not attest to competency unless the student has received the associate degree or a certificate of competence.

Question: We have been told that in order for employees to be successful in the workplace, they must not only have basic skills but they must be capable of thinking -- higher order learning. Do you know of any programs that have been successful at teaching trainees or students to think -- not just to be able to read, write and count?

Answer: Obviously teaching students to think is the next step after basic skills. "Higher Order Learning" is a phrase that could be applied to the associate degree. A degree from a community, technical, or junior college is essentially designed to assure broad basic skills (math, science, and communication skills) with laboratory work that embodies the practical applications of the workplace. Such a skill base builds the kind of flexibility that is necessary in the information/technological age workplace constantly requiring workers to absorb new technological changes.

For example, curriculum programs as diverse as electronics, nursing and construction management -- all embody coursework exercises that challenge the critical thinking skills of students. Indeed, there is no associate degree that does not require a basic communication course -- a course that is essentially an on-going exercise in the logical presentation of points of view on various topics. This is only the beginning in a series of courses that tests the students "trouble shooting" skills in areas of selected expertise.

However, it does seem that another problem exists in workplace learning that does deserve your attention. Large amounts of union training funds go begging, because many workers see themselves immune to permanent lay-off -- that is until the pink slip arrives, and then time becomes a critical negative factor in the adjustment equation. Front Range Community College, Colorado, has used a Retraining Preparedness Program to address the resistance to change, the inadequate self-confidence, and the deficiencies in learning that block worker transition. The program has been created around specific projects with IBM, AT&T, and Mountain Bell/Communication Workers of America. This is by no means the only example of this type of initiative, but it is a good one.

Question: It is difficult enough trying to retrain dislocated workers but at least we know who these people are and they are frequently anxious to be retrained as they are used to working. How do we find the so-called hardcore unemployed and motivate them to accept training?

Answer: Many state and local service agencies have been created which locate and respond to the needs of the hardcore unemployed. Coordination among agencies remains a problem. For example, local school districts and juvenile courts should work together to identify dropouts for the employment security service, so that counseling and training could begin at the earliest possible age. This could all be done by an integrated computer network. Job Corps is probably the best example of the all inclusive type of program. Community colleges attempt to provide education training and special services to this population, however, the overall management of the hardcore unemployed goes far beyond the scope of community colleges. One answer has been the development of the "Middle College" idea at some of our colleges whereby potential high school dropouts are identified early and a different program is available to them.

Question: Ms. Wills raised an interesting question in her testimony that I would like you to consider: Is the employer to bear the cost of retraining current workers when basic literacy is the issue or should be cost be borne by the public?

Answer: Ms. Wills' question about whether basic literacy training is a private or a public responsibility is interesting, but I strongly contend that it is not an either/or situation, it is both a public and a private responsibility and without both giving it their best coordinated efforts, America will not have a workforce capable of keeping America competitive. Education of the adult worker is just as worthy of public support as 6th grade English, college English or adult basic literacy. We must get over the idea in this country that all individuals learn at the same rate of speed. In a country with our diverse population we need an education and training system that is responsive to the diversity of our population.

We have put a lot of public money into helping individuals secure a college baccalaureate degree, but how much money and effort have we put into developing the best educated and most productive workforce in the world?

HARVARD UNIVERSITY
JOHN F. KENNEDY SCHOOL OF GOVERNMENT
79 JOHN F. KENNEDY STREET
CAMBRIDGE, MASSACHUSETTS 02138

GLENN C. LOURY
Professor of Political Economy

(617) 495-0807

November 13, 1987

Deborah Matz, Economist
Joint Economic Committee
Congress of the United States
Washington, DC 20510

Dear Ms. Matz:

Enclosed is an article of mine which I am submitting for inclusion in the record of your hearings on "Competitiveness and the Quality of the United States Workforce."

Sincerely,

Glenn Loury

Glenn C. Loury

GCL/lm

From: Measures in the College
Admissions Process
College Entrance
Examination Board
New York, 1986

The Dimensions of Excellence in a Pluralistic Society

GLENN C. LOURY

America has witnessed a social revolution around the issue of race relations in the last 30 years. It is, however, a woefully incomplete revolution. In the 1950s there were very few minorities to be found on the elite university campuses, in influential positions with local, state, or federal governments, or exercising real power in the corporate sector. This was due, as all have now come to acknowledge, to pervasive exclusionary practices, both within these institutions and, more broadly, in American society. The result was the waste of enormous human potential, the embitterment of a significant minority of the American population, and the perpetuation of an embarrassing disparity between the ideals embodied in the American creed and the realities of life for millions of nonwhite Americans.

Things have changed a great deal since the 1950s. A powerful social movement began in the southern states with opposition to the petty apartheid of Jim Crow, and quickly engulfed the entire nation. The civil rights movement brought long-sought legal and political changes, but perhaps more important, it occasioned the initiation of a moral transformation affecting attitudes in every region and sector of this society. A new view, previously found only in the most progressive and liberal quarters, attained the status of an orthodoxy. This view emphasized the necessity of ensuring equality of opportunity irrespective of individual ascriptive characteristics such as race, sex, or national origin. But this new understanding went further: It stressed the obligation of previously exclusive institutions to reach out affirmatively to those not historically included. It properly placed the primary responsibility for change on the shoulders of those elite and powerful sectors of American society to which minorities had in the past been denied access.

Institutions of higher education were particularly susceptible to the new dispensation of race relations that began to emerge in the early 1960s. This is hardly surprising; higher education had become, in the post–World War II period, the natural stepping stone to success in the American meritocracy. If those previously left behind were now to be included fully in society, their access to colleges and universities would obviously have to be improved. Moreover, many college campuses at this time were centers of liberal activism, and most had for some years shown a greater receptiveness than the surrounding society at large to the claims of minorities fighting against the unfairness of discrimination. Along with the rise of student protests against the Viet Nam War and the emergence of a countercultural critique of mainstream American values, a keen sensitivity developed among students and faculty to the racial exclusiveness of their privileged environments. Thus, in addition to the legal and regulatory pressures to integrate that were brought to bear on higher education by the civil rights enforcement activities of state and federal governments, there were powerful internal forces working to encourage these institutions to broaden the spectrum of American society from which their students were selected.

Much progress for minorities has accompanied this change of law and attitudes. In 1960 the average black college graduate earned less than the average white with only a high school diploma; today the earnings of young black and white college graduates are nearly identical. The vast majority of blacks in college a quarter century ago attended predominantly black institutions in the South. Now many of these institutions are struggling to mainstream enrollments, in large part due to the wider opportunities for higher education at predominantly white colleges and universities now available to blacks. Overall college enrollment of minorities has improved dramatically since the early days of the civil rights movement. Elite university campuses where blacks and Hispanics were virtually invisible two decades ago now give clear evidence in their cultural life, and in their curriculums, of the diversity of their student bodies. The entering classes of the nation's top professional schools show substantially more women and minorities today than they did in the earlier era.

This change is not merely the result of the removal of discriminatory barriers, but also reflects the aggressive efforts of many institutions to engage in "affirmative actions" on behalf of previously excluded groups. Achieving an ethnically diversified freshman class is now a nearly universally accepted desideratum, even at the nation's most academically selective institutions. There can be little doubt that being a member of a disadvantaged minority group *improves*, rather than retards, the chances of being admitted to the most competitive institutions. Those minority students with outstanding academic profiles are vigorously pursued by selective institutions competing with each other for access to this scarce and valuable resource. There are a host of special programs and summer institutes, funded by the colleges themselves or with the assistance of private foundations, that aim to help blacks and Hispanics succeed in their chosen fields of study at the undergraduate and postgraduate levels.

Lest I be misunderstood, let me emphasize that I do not maintain that racial discrimination has disappeared from the scene in higher education. Nor do I seek, with the foregoing acknowledgments, to assure those in charge of our colleges and universities that they have now done enough and should be let "off the hook." What is clear, however, is that of all the sectors of American society that have been affected by the revolution in race relations of the past generation, higher education has shown itself to be able, and in some instances eagerly willing, to initiate far-reaching change in the interest of promoting greater diversity. I know this from the statistics, and I have also learned this from direct observation. As someone who has spent the better part of the last two decades in academic life, and who has benefited directly from scholarship and fellowship funds targeted at minority student populations, I can affirm that doors which were closed to blacks of my parents' generation regardless of their abilities are now open for those minorities prepared to walk through them.

But it is also clear that all is not well in post–civil rights academe. For despite the aforementioned efforts and successes, the status of disadvantaged minorities in higher education leaves a great deal to be desired. The number of blacks advancing in the academic world remains distressingly low. The percentage of college students who are black has, after rising throughout the 1970s, in recent years actually begun to decline. Entering classes at some of the most elite of our institutions now show fewer black students than was the case five or ten years ago. While I know of no comprehensive data on this matter, it seems to me that fewer genuinely poor black and Hispanic youngsters from the inner cities of this country are being admitted to the academically exclusive institutions than were admitted in years past. Minority enrollments in graduate and professional schools have also failed to show a steady advance toward equality. The proportion of doctorates being awarded to blacks, though rising slightly over the past decade, remains below 3 percent, with roughly half of such degrees in the field of education. Despite constant pressure to hire black professors and strenuous efforts to recruit them, the percentage of blacks on elite university faculties has remained constant or fallen in the past decade.

Moreover, and this is a matter of exquisite sensitivity, there appear to be noticeable differences in the academic performance of minority and nonminority students after admissions. Black and Hispanic students are overrepresented in the remedial classes in English and mathematics offered to freshmen at many universities. Attrition rates are higher among minority students and college grade-point averages are lower (even when controlling for test scores and high school achievements). Casual observation (again, I know of no careful study of this question) suggests that disadvantaged minority students are significantly underrepresented among the most academically outstanding students at the leading colleges and universities. Among the administrators and faculty members with whom I have spoken in recent months, representing several Ivy League universities and a number of highly selective liberal arts colleges in the East, not one has failed to confirm that within their own institutions there exist pronounced racial disparities in academic performance.

This fact of racially differential academic performance, in the face of extraordinary efforts to recruit and retain minorities in higher education, is of enormous significance. It raises the question of whether schools can succeed at fully integrating minority students into their necessarily meritocratic communities. It is, without doubt, a crucial underlying factor in the reaction of many who are critical of the continued practice of affirmative action in college admissions. This is particularly so at the academically exclusive institutions whose elite status and reputations depend upon the very meritocratic ethos that some defenders of preferential admissions policies openly attack. For these institutions, the "meritocratic imperative" is an essential part of their identity, and the source of their power. (I recall a professor of education at Harvard giving a talk to black students there in which he urged them to eschew the elitist and competitive academic values of the institution. As many of these students were under enormous pressures to perform, one can understand his point. The only problem with his advice is that the reputational value of the Harvard degree, which these minority students sought when initially choosing to come to Harvard, depends upon the maintenance among the majority of students of this very ethos.) Put directly, the legitimacy of the now two-decades-old effort to diversify the student population at America's leading institutions is undermined by this performance gap.

"Why should that be?" many will ask. "The legitimacy of such efforts is grounded in the same historic practices of discrimination and exclusion that explain the performance gap," they might say. I once found this to be an adequate response—after all, it could hardly be denied that minorities and, to a lesser extent, women had come from poorer families, had been given inferior educational opportunities, and could therefore not be expected to perform in the same manner as nonminority students. Moreover, it is still the case that most college and university campuses are white-dominated, miniature societies that reflect all the problems, prejudices, fears, and frustrations characteristic of the larger society. Contemporary surveys of minority student attitudes reveal that many feel intellectually marginal, socially uncomfortable, and not especially welcome on their home campuses. Problems of racial animosity in the groves of academe have been the focus of much recent attention in the press and among those professionals responsible for the quality of student life on these campuses. In light of the history of racism in American society, the failure of minority students to attain the highest levels of academic achievement could plausibly be attributed to the inhospitability of the social environments that receive them. From this perspective, the reference to racial differences in performance by those critical of preferential admissions policies seems particularly disingenuous, since those performance differences are seen to be the consequence of a failure to implement fully the ideal of equal opportunity.

It seems to me that something like the foregoing argument held sway among people of goodwill through the mid-1970s. It permitted concerned observers to minimize the difficulties posed by overt performance differences as they proceeded to open their institutions to minority students. Yet, for a number of reasons to be discussed presently, I no longer find this a persuasive argument. Without denying the fact that black and Hispanic students face problems at predominantly white institutions with which other students need not cope, it does not seem to me that the gap in academic performance can be explained quite so easily. For one thing, it is quite possible that the performance gap coupled with preferential admissions policies is in part a cause, as distinct from an effect, of the racial tensions evident on so many college campuses. It is perhaps to be regretted that the focus of efforts to increase diversity on America's campuses has been almost exclusively on minority group members, and not on disadvantaged persons more generally, for this has encouraged an association to be drawn between minority status and recipiency of preferential admissions treatment that is destructive to harmonious race relations. Some minority students have in recent years reported to survey researchers the feeling that nonminority students on their campuses think of them as academically marginal, and as not being there on merit. In those academic settings where minority students are visibly overrepresented among poor performers and underrepresented among outstanding students, and where minority presence on campus is a publicly debated issue of university policy, it is to be expected that the resulting asymmetries of power, status, and security inherent in such a situation will lead to attitudes of condescension and contempt among some nonminority students, and to resentment and envy among some minorities.

It would be a mistake to see these very difficult matters of mutual respect among students of different backgrounds as *simply* a question of the institution not doing enough to make minority students welcome. I know that many schools have permitted ethnic-concentration dorms and have provided—sometimes after being pressured to do so—for Third World cultural centers and the like. Others have chosen not to do so. These may or may not be desirable policies. But they obviously cannot compensate for the absence of that security and esteem to be garnered, in an *academic* institution, from outstanding *academic* performance. The very existence of programs designed to provide greater minority access ensures that attention will be focused—by the students themselves, the university community, and the larger society—on minority student postadmissions performance. When that performance lags, as it apparently does now, the legitimacy and standing of minority students is bound to be undermined.

Another reason why I find unconvincing the argument that racially differential performance is rooted in the racism of contemporary academic institutions is that other traditionally excluded groups have made impressive academic gains during this recent period. The remarkable success of Asian-American students—even recent immigrants—has been much discussed. Women, too, have made dramatic progress, with, for example, their proportion of new doctorates doubling over the course of the past decade. Contemporary American universities are, in the main, relatively liberal institutions. It strains the credulity of those who see the universities as liberal bastions to assert that their racist character prohibits minority access. Beneath the shrill and urgent, though not entirely plausible, cries of "racist indifference" at, let's say, Brown University, there lie, I fear, insecurities that will not be so easily assuaged.

This brings me to the topic of test scores, the subject of this colloquium's deliberations. Surely one reason to be skeptical that discrimination is the cause of the performance gap is the well-documented racial disparity in student performance on standardized college admissions examinations. In reviewing the papers for this colloquium and some of the statistical literature on the predictive power of the Scholastic Aptitude Test for tracking college grades and the like, I noticed that black–white differences in SAT scores, and their implications for minority access, have been central issues in the discussion. Undoubtedly this is one of the main reasons why we are gathered here. I will not address the questions that arise concerning the propriety and efficiency of the use of the SAT, in conjunction with other available information, in the admissions process. That seems best left to the technical experts and practitioners whose views follow.

But I would like to stress that the information inherent in these test score differences—information about the differences in academic achievement between the racial groups—cannot be wished away, and is crucial to formation of educational policy. Despite legitimate concerns about cultural bias and "coachability," and despite the recent modest improvement in relative minority performance on academic tests, my sense is that these tests confirm a troubling reality. And it is that reality—the significant difference in the quality of primary and secondary academic preparation of different groups—and not the testing-instrument messenger that informs us of it, that deserves the attention of those concerned with securing meaningful equality for minorities.

One troubling feature of this situation is that the differences in academic performance revealed in testing and other data are not limited to poor, inner-city black populations. The SAT gap remains substantial after controlling for parents' socioeconomic status. The black students now entering the most selective institutions are increasingly similar in socioeconomic background to their white counterparts. Many have attended private or exceptionally strong public schools. And some studies (for example, among Harvard undergraduates) have shown lower black postadmissions performance (measured by grades) among students with similar SAT and high school backgrounds.

My friends Jeff Howard and Ray Hammond proposed in *The New Republic* ("Rumors of Inferiority," Sept. 7, 1985) that the values and behavior of black students concerning academic competition may be partially at fault here. Briefly, their argument is that an internalized group expectancy of poor academic performance leads black youngsters to avoid the kind of engagement in academic rigors necessary for success at the most competitive institutions. Poor performance, from this perspective, becomes a self-fulfilling prophecy on the part of black students. The way to break out of the cycle, they suggest, is through a deliberate effort to control the "expectancy communications" to black students, so as to alter what they term the "intellectual work ethic" of blacks.

I do not know if this explanation of differential performance is correct or complete. I do know that Howard and Hammond have developed intervention strategies, based on this reasoning, that have been effective at improving minority academic performance in the most unlikely of settings—inner-city Detroit. I also know that there are currents in minority-student culture that conform to the observations of Howard and Hammond. One of the most striking examples of this was my recent discovery of the use of the term "incognegro" among blacks at MIT to describe fellow black students who excelled academically in that environment. (Incognegro. Get it? You can't really tell that he's black!) But this is a matter that deserves exploration through more than anecdotes. There should be more research done on this sensitive yet crucial question.

In any event, all of this suggests that there is much more to the performance gap than racial discrimination in higher education. It also suggests that the challenges facing higher education now, and for the remainder of this century, insofar as minority access is concerned, will be far less tractable, more sensitive, and more subtle than those of the past. In fact, this is to my mind the distinguishing feature of race relations in our age. We are moving between an era when denial of minority opportunity was the central problem, to one in which the difficulty is that of assuring that minorities will be able to take advantage of the substantial equal opportunities that do exist. This would seem to be an extremely difficult transition to manage. There is much suspicion and distrust of institutional motive, due to past denial of opportunity. And we are not yet living in a world where old-fashioned racial discrimination and enmity can be ignored as possibilities. But we are moving toward such a state, and it is important to avoid well-intentioned actions that may actually retard our progress.

In a recent issue of *Daedalus* there appeared an essay by political scientist Harry Eckstein called "Civic Inclusion and Its Discontents" (Fall 1984). In it Eckstein argues convincingly that throughout the history of western democracy, efforts to democratize society's governing structures—including the expansion of political participation and educational access—have been frustrated, at least in part, by the preferences and behavior of those on whose behalf the movement for inclusion has been undertaken. He postulates, tentatively, that the "authority structure" of working-class family life affects the socialization of children raised in this milieu in such a way that they are unable or unwilling to avail themselves of the expanded opportunities for social mobility that liberalization affords. In the hands of a political conservative, such argument usually ends with a rejection of the effort to "open things up" for the lower classes as futile.

But this is not the only inference to be drawn from Eckstein's general argument, or from the version of it that I have set forth. Rather than abandoning the effort to achieve greater inclusion in the face of such difficulties, one might consider how it is that the strategies for truly integrating higher education in America might be made more effective.

In this regard one key question that arises is the wisdom of broad, permanent reliance on racially preferential policies in college admissions as a primary instrument of increasing minority access. I have come to have serious doubts about the wisdom of using such preferences to the extent that we now do, especially in the face of clear group differences in postadmissions performance.

My concern is that there may be an inconsistency between the broad reliance on preferential admissions for minorities, on the one hand, and the attainment of a "true equality" for disadvantaged minorities, on the other. By "true equality" I mean more than a formally equal distribution of groups among positions. Also crucial, I maintain, is something approximating an equality of respect and standing in the eyes of one's fellow citizens. Attainment of this goal is impossible when many members of the disadvantaged group must rely, permanently and as a matter of course, upon preferential treatment of one kind or another.

There is a sense in which the demand for quotas, which many see as the only path to equality for blacks, concedes at the outset the *impossibility* that blacks could ever be truly equal citizens. For, aside from those instances in which hiring goals are ordered by a court subsequent to a finding of illegal discrimination, and with the purpose of providing relief for those discriminated against, the use of differential standards for the hiring of blacks and whites, once institutionalized, acknowledges the inability of blacks to perform up to the white standard. This, I suggest, is deadly in a meritocratic institution like a university.

Thus at Harvard, Derek Bok, our president, publicly declares—in defense, he thinks, of black interests—that without the use of racially preferential admissions policies, things would revert to the bad-old-days when only 1 or 2 percent of the entering class was black. This implies that blacks, on the whole, must through the use of quotas make up for what they lack in intellectual capabilities. In New York City, where the last examination for promotion to police sergeant was passed by 10.1 percent of whites, 4.4 percent of Hispanics, but only 1.7 percent of blacks, the city has agreed to scrap the test and promote its quota of blacks. Because fewer blacks passed the test and because the city's legal department does not think it could be defended as job-related, city officials now say the test discriminates illegally. Yet, the test was explicitly prepared (at a cost of $500,000 and under a court-supervised consent decree) so as to test only job-relevant skills. No one really believes the *test* was unfair to nonwhite officers; only the *results* are questioned. But, after this episode, can anyone be made to believe that blacks are capable of the same results as whites?

The effects of such thinking may be seen in our response to almost every instance of racially differential performance. When blacks cannot pass a high school proficiency test as a condition of obtaining a diploma, "throw out the test" is the cry. When black teachers cannot exhibit skills at the same level as whites, the very idea of testing teachers' skills is attacked. If black athletes achieve the minimal academic standard set for those participating in intercollegiate sports less frequently than whites, then let us promulgate for them a separate, lower standard, even as we accuse of racism those suggesting the need for a standard in the first place. When black students are unable to gain admission at the same rate as whites to the elite public Boston Latin School, let's ask a federal judge to mandate black excellence.

The inescapable truth of the matter is that no judge can mandate excellence, just as, in the end, no selection committee can create distinction in black scholars. And ultimately, no degree of double-standard setting can make black students competitive or comfortable in the academically exclusive colleges and universities. Indeed, when all is said and done, nothing less than the earned achievements of minority Americans can form the basis of a true and lasting equality in this pluralistic society.

COMPETITIVENESS AND THE QUALITY OF THE AMERICAN WORK FORCE

THURSDAY, DECEMBER 3, 1987

Congress of the United States,
Subcommittee on Education and Health
of the Joint Economic Committee,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:39 a.m., in room 2359, Rayburn House Office Building, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Present: Representative Scheuer.

Also present: Deborah Matz and Dayna Hutchings, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE SCHEUER, CHAIRMAN

Representative Scheuer. I am delighted to welcome our distinguished witnesses to this—our final day, in what we like to think has been an extraordinarily interesting and useful series of hearings on "Competitiveness and the Quality of the American Work Force."

We will go off the record for a moment.

[Discussion off the record.]

Representative Scheuer. In the course of these 9 days of hearings, we have heard from more than 50 witnesses. The hearings explored the linkages between education and the skills of the work force and the competitiveness of our economy as well as the wholeness and the health of our society.

Today we will hear from some of the outstanding witnesses who could not participate at an earlier time, and they will cover some important issues which we haven't as yet covered.

On the first panel we will hear from Richard Heckert, who is chairman of the board and chief executive officer of the Du Pont Co. He is chairman of the board of trustees of the Carnegie Institution of Washington and a trustee of the Delaware Council on Economic Education in the Medical Center of Delaware.

Second, we will hear from James Dezell, Jr., general manager of IBM's educational systems, a division that is responsible for marketing educational products and technology.

I have had the pleasure of meeting Mr. Dezell and seeing the remarkable product that IBM has turned out to teach literacy and other skills to low-education people, and they are doing remarkable work.

Third, we will hear from Mr. Robert Glover, research associate at the Center for the Study of Human Resources at the University of Texas at Austin, a research unit of the Lyndon B. Johnson School of Public Affairs. Mr. Glover has authored 30 or more books on education and training and so forth, including a recent monograph entitled "Apprenticeship Lessons From Abroad."

Then we will hear from Mr. Douglas Glasgow, vice president of the National Urban League's Washington operations. Mr. Glasgow is responsible for maintaining liaison with all of the facets of the private sector as well as the government machinery headquartered here in Washington. He has authored a book entitled "The Black Under-Class," the oft-debated issue of the etiology of blacks.

Then we will hear from Marc Tucker, executive director of the Carnegie Forum on Education and the Economy. I want to pay tribute to Marc Tucker as the great eminence behind these hearings. He has counseled us and advised us from the very beginning, and we owe an enormous debt of gratitude to Marc Tucker.

Now, we will get on with the witnesses. Why don't you each take about 10 or 12 minutes to speak to us informally, just imagine we are all in a living room together. Rather than read from your text, just tell us from your life experience what it is you know, what your convictions are, and what direction you think our country should take. Your prepared statements will be printed in their entirety in the hearing record.

So, let's go through the list and we will hear from each of you, and then, of course, we will have some questions for you. So, in the order in which I introduced you, we will start with Mr. Heckert.

Take your 10 minutes, Mr. Heckert, in a relaxed way. Chat with us. And then after we hear from the other witnesses, we will have some questions.

STATEMENT OF RICHARD E. HECKERT, CHAIRMAN OF THE BOARD, E.I. DU PONT DE NEMOURS & CO.

Mr. Heckert. Thank you, Mr. Chairman.

I will stick to my text so that I won't leave out the important things that we would like to pass along, but I think that you will find it informal and, I hope, instructive.

I will begin by observing that Du Pont employs 100,000 people in the United States and approximately 40,000 people in 50 other countries. We have worldwide sales of about $28 billion. Our major businesses are chemical and specialty products, and energy. As my prepared statement documents in more detail, we are successful competitors in international trade. If there is such a thing as a corporate balance of trade, ours was a surplus of $1.8 billion last year.

You have asked me to discuss Du Pont's experiences in regard to competitiveness and the line workers in our plants. These basically would be the people who came to us out of high school and in some cases before completing their high school education.

I can offer testimony from the Du Pont perspective and also from a study that I chaired with the National Academy of Sciences. This study was entitled "High Schools in the Changing Workplace: The Employers' View." One of the first conclusions of the academy's study was that the requirements of employers haven't really changed that much in the last two or three decades.

One of the first conclusions of the academy study was that we need from schools today exactly what we have always needed. We need prospective employees who are willing and able to learn and adapt. The key phrase here is "willing and able," and it encompasses attitude and the basic skills of reading, writing, math, and reasoning, among other things. At Du Pont, trainability is a most important factor. For that reason, we conduct preemployment tests that are aimed at indicating the prospect's potential for success, and these tests are validated. They include simple exercises involving the three R's. Management at several of our plant locations report that significant numbers of young adults have been unable to pass these very simple preemployment tests.

At one site, 75 percent failure was reported. The failure rate was reported to be because of reading and comprehensive difficulties, which I am sure are related. A person who cannot read properly obviously will have difficulty comprehending written instructions. We do not employ people who do not have the basic skills of communication and computation, because they are not able to benefit from the training programs that we offer and they are dangerous to themselves and to others in the workplace.

So, at Du Pont, because we hire selectively, we do not have a discernible problem at this point. Our U.S. work force is second to none in quality, productivity, and safety.

However, it may become more difficult to maintain these high standards in the future. Demographic trends indicate a tightening of the labor market, combined with substantial percentage increases in the population groups that are most at risk in our schools today.

If we reach the point where we are forced to significantly lower our standards for entry-level workers, it may be that eventually companies such as Du Pont which have a track record of success in international trade will be less competitive with our overseas rivals.

I already noted that our current needs in regard to prospective employees center on trainability. The same will apply in the future, only more so. This is borne out by a Du Pont study in which we sent out a team to interview management and supervisory personnel at employment sites in six States: Pennsylvania, Virginia, South Carolina, Tennessee, Texas, and Delaware. I think that it is a pretty representative sampling of the United States. The sites visited represented a cross section of our facilities in this country. There was broad agreement that four circumstances will strongly influence the industrial working environment in the years ahead:

One, continued progress in productivity via automation, electronics, and computer applications, will certainly influence the work environment.

Two, a continuation and expansion of the trend towards less direct supervision of individual job responsibilities. This is very important. Employees will be required to make more and more complex decisions about auxiliary and manufacturing line functions involving intensified mechanization, instrumentation, and computerization.

Three, simple, repetitive jobs increasingly will be performed by machines and more of the narrowly focused work previously performed by so-called specialists will be accomplished electronically.

Representative SCHEUER. Excuse me. I think the last point you are making, is that you will need less low-skill, low-literacy labor in the future.

Mr. HECKERT. That is exactly right.

Representative SCHEUER. And the point before that was that the folks that you do employ in the future are going to have to be able to exercise real judgment on the job in making important decisions from time to time?

Mr. HECKERT. That is a very important trend in American industry. I don't think that we are unique at Du Pont at all. More and more companies are reducing levels of management, expecting their people all the way up and down the line to exercise their own judgments, take more responsibility; and, as a consequence, our operations are improving. There is great talent in this work force if you turn it loose, and you turn it loose by not looking over their shoulder every minute of every hour of every day.

Representative SCHEUER. I do not mean to interrupt you. But it brings to mind the Japanese practice on the automobile production lines. Every worker on an automobile production line in Japan can grab a pulley and stop the production line, which is a very expensive business, and therefore it is an important decision. He can stop it if there is a safety problem, if there is a quality problem, a defect in the work that he sees coming by, if there is a materials problem, whatever.

So, the company is investing in him a great deal of confidence that he can make those value judgments and make them intelligently. This makes him feel good because he feels that he has been empowered by the company to make significant decisions. So, it is sort of a two-way street. It is a good, symbiotic relationship.

Mr. HECKERT. You literally took the words out of my mouth. I was about to say that it makes the employee feel good.

Representative SCHEUER. Go ahead.

Mr. HECKERT. These changes will require teamwork and positive work relationships throughout the work force.

The fourth point is that continual retraining will be needed as new skills and understanding are required to meet new technologies in the factory and in the office. Change is constant. We envision a career-long process of on-the-job training and retraining.

Consequently, entrants should have basic education and personal and interpersonal skills. Also, they should be compatible with the work environment, possessing those personal attitudes and attributes that are essential to effective performance on the job.

Among the most important of these attributes are a positive attitude toward team objectives, a willingness to work as part of a group, a clear understanding and an awareness of the employer's fundamental requirements and expectations. These include—and I have underlined this—consistent attendance and punctuality.

That was not a shot at you, sir. [Laughter.]

Representative **Scheuer**. If it was, it was well merited, and I plead guilty. Mea culpa. [Laughter.]

Mr. **Heckert**. At Du Pont we offer a wide range of courses in instrument training, electronics, general mechanical work, inventory control, materials handling, just to name a few of our important operations.

Training is available to all employees, and in many cases it is a requirement. I don't think that any of our 140,000 employees have escaped some exposure to a Du Pont training program.

Lack of vocational training facilities within corporations and in the public sector is not the fundamental problem, in our view. There are many excellent job training and retraining programs, including government programs. But the people who most need this kind of help cannot get it, for the same reason that they can't get a job: they lack the core competencies. People who cannot adequately read, write, or do math cannot learn how to become carpenters, electricians, and plumbers. Without at least a sixth-grade competency, they cannot even get into most of these programs.

The problem, as we see it, centers on an apparently increasing number of entry-level people who lack these very important core competencies. If this problem can be resolved, companies such as Du Pont will remain internationally competitive. If it cannot be resolved, look out.

The place to begin improving future competitiveness is in the classroom at the earliest possible point in the education system, teaching clear, two-way communication in standard English and then going on to math and the other disciplines. Efforts to rescue the hard-core unemployed or upgrade the ability of unskilled workers should start with the same core competencies.

I respectfully urge the subcommittee to give consideration to this fundamental point before making your recommendations, and I thank you for the opportunity to tell the Du Pont story.

Representative **Scheuer**. Thank you very much, Mr. Heckert. We looked forward to your testimony with great anticipation, and you have not disappointed us.

[The prepared statement of Mr. Heckert follows:]

PREPARED STATEMENT OF RICHARD E. HECKERT

Mr. Chairman, members of the Subcommittee, my name is Richard E. Heckert and I am chairman and chief executive officer of the Du Pont Company.

Thank you for this opportunity to present oral and written testimony on the very important subject of "Competitiveness and the Quality of the American Workforce". My testimony is from the perspective of a company that employs 100,000 people in the United States and approximately 40,000 in 50 other countries. We have worldwide sales of about $28 billion. Our major businesses are chemical and specialty products, and energy.

We have been in business for 185 years, and for most of the time since our founding in Delaware in 1802 we have sold products overseas. Last year we exported $2.6 billion worth of products from the United States while our imports -- mainly of raw materials -- totaled $800 million. This gave us a U.S. surplus in international trade of $1.8 billion. Our sales in Japan, which is generally considered to be one of the toughest overseas markets, exceeded $1 billion last year. They will double or triple by 1995. The point in mentioning this is to show that an American company can compete successfully with foreign rivals, not only at home but in overseas markets as well.

I have been asked to testify specifically about Du Pont's experiences in regard to competitiveness and the line workers in our plants. These, basically, would be the people who came to us out of high school and, in some cases, before completing high school. At the present time, Du Pont does not have a discernible problem with its U.S. labor force on the factory floor, in the office, or in the laboratory. Our employees in the United States are second to none in terms of productivity, creativity, and safety. That is the situation so far. However, we are concerned about the future, particularly in the event that the forecast tightening in the labor market does occur in line with demographic trends, and in view of what is perceived as America's problem of undereducation.

As we see it, the current problem is not in our factories, but in our schools, so I would like to spend a little more time in that area than in discussing retraining.

First, I want to emphasize that the American education system at its best is the best in the world, because of its unique combination of academic opportunity and individual freedom of thought. This reflects the national character. Americans as a whole are less regimented, less rigid, and less disciplined than people in Europe and Asia. Those people in our society who are sufficiently motivated to achieve a good education go on to make enormous contributions in science, engineering, and administration -- to name those disciplines most commonly associated with industry. Certainly they do think more freely. These are the reasons why a Japanese company will invariably prefer to hire a scientist or an engineer from a U.S. rather than a Japanese university, given the choice.

But it's not enough to turn out a few thousand or even a few million extraordinarily competent people. If the United States is to prosper as a democracy in the future, most if not all Americans must be capable of making rational and informed judgments as voters, in addition to having world-class competence in the workplace.

Too many people are leaving high school without the core competencies that they need to achieve even a minimum degree of success in this technological society. This was a finding of a study conducted under the auspices of the National Academy of Sciences (NAS), in conjunction with the National Academy of Engineering, and the Institute of Medicine. The study was entitled "High Schools and the Changing Workplace -- The Employers' View", and I had the honor to be its chairman. The study was completed in 1984. Its basic findings remain valid, and have been supported by subsequent research.

The core competencies identified by the NAS study include the ability to reason, read, write and compute; a knowledge of the basic principles of science; the ability to interact productively within a group; good work habits and attitude; and an understanding of American economic and social life. The essence of this is learning how to learn, and learning how to behave. These have always been the objectives of a traditional education. On this basis, the high school curriculum is in line with employers' needs.

Indeed, one of the first conclusions of the NAS study was that the requirements of employers have really not changed. What we need from the schools today is what we have always needed. We need prospective employees who are willing and able to learn and adapt. These are the basic requirements and, in order to achieve them, students need the core competencies -- a framework of knowledge and skills to which new knowledge can be added.

To some degree, the system is failing to deliver what the curriculum promises. If it were not -- if everybody coming out of high school had the core competencies -- there would be no need to hold these hearings. The members of this Subcommittee are familiar with the data -- a high school drop-out rate of 50 percent in some areas, high truancy rates, and functional illiteracy even among some high school graduates. And you know that the segments of the population that are the most at risk are the fastest-growing. So if current trends continue, we can expect more undereducation in the years ahead. This has negative implications for America's economic and political health and welfare in the future. The problem must be remedied. The question is, where does it start?

Most people enter the work force from high school, and if they lack the core competencies when they come to us, we employers tend to blame the last school -- the high school -- for their failure. Actually, educational failure in many cases begins long before high school, in grade school and in the home if the home life is disruptive and the parents (or parent) are not supportive. This has been our experience at Du Pont. In grooming minority students for careers in science and engineering, for example, we like to begin at the seventh or eighth grade, with tutoring and -- very importantly -- trying to get parents involved. This is where the battle is very often won or lost, and if there is a further role for the federal government at pre-college levels, perhaps it should be in teachers' aides, family counseling, and tutoring in grade schools, working with the local school boards at the community level. Some of the educators we work with in our home state of Delaware say they can identify as early as the third grade children who are likely to fail. If we can avert failure at those levels, before the children fall far behind, performance in the high schools would be greatly improved. It is never too early to start teaching the core competencies, without which other programs cannot succeed.

There are many excellent government programs to prepare young people and older hard-core unemployed for jobs, but the people who most need this kind of help cannot avail themselves of the programs for the same reason they can't get jobs -- they lack the core competencies. People who cannot adequately read, write and do math cannot learn how to become carpenters, plumbers, and electricians. Without at least a sixth-grade competency, they cannot even get into many of the programs. This is why the vocational training programs are falling short. We have vocational schools that cannot attract enough students. Rescue efforts should and must begin at earlier levels, with the core competencies.

At Du Pont we have long enjoyed the fortunate situation of not being dependent on the general labor pool. Because of our reputation as a science company and as a leader in a number of technologies, prospective employees have sought us out, and we have been able to pretty much pick the best of the crop. The main thing that we look for is trainability. For that reason, we conduct pre-employment tests that are aimed as much at indicating the prospect's potential for success as his or her current ability. We very carefully validate these tests. They include simple exercises in reading and writing.

Managements at several Du Pont plant locations report that significant numbers of young adults who seek jobs with us have been unable to pass the reading and writing tests. At one site a 70 percent failure rate was reported in pre-employment tests because of reading and comprehension difficulties, which I am sure are related. A person who cannot read properly obviously will have difficulty comprehending written instructions. We do not employ people who do not have the basic skills, because they are not able to benefit from the training programs that we offer, and they are dangerous to themselves and to others in the workplace. That is why we do not have a discernible problem at this point.

(I should add that, although companies such as Du Pont should continue to be supportive, there is a limit to how far back we can and should go in training workers. Teaching reading, writing, and arithmetic on a large scale is not our role, and neither is the teaching of values. These are more properly the responsibilities of the education authorities and of parents.)

Further evidence of undereducation among job seekers was provided earlier this year when the New York Telephone Company gave a basic reading and reasoning test to 21,000 job applicants. The failure rate in this case was 84 percent. If the telephone company only needed 16 percent or less of the total applicants, the company itself did not have a problem. But if there were a labor shortage, and it needed most or all of the applicants, then it might have a serious problem.

The point here is that it may well become more difficult to maintain standards of quality, productivity, and safety in the future unless the general level of core competencies is raised. Demographic trends indicate a tightening of the labor market combined with substantial percentage increases in minority proportions of the work force -- the students who are most at risk in our schools today. If we reach the point where we are forced to significantly lower our standards for entry-level workers, companies such as Du Pont, which have a track record of success in international trade and which are now helping to reduce America's trade deficit, may well become less competitive with overseas rivals. We know from hard experience that our competitors are tough, smart, hardworking and, for the most part, well-served in basic education.

The chairman indicated the Subcommittee is seeking further testimony, regarding the future needs of business. In conjunction with the

NAS study referred to earlier in this statement, a Du Pont study group visited and interviewed management and supervisory personnel at eight employment sites in six states -- Pennsylvania, Virginia, South Carolina, Tennessee, Texas and Delaware. The sites visited represented a cross section of Du Pont facilities involved in manufacturing, research, technical and customer service, office work and engineering. There was broad agreement that four circumstances will strongly influence the industrial working environment in the years ahead. They are:

One -- Continued progress in productivity and automation via electronics and computer applications.

Two -- A continuation and expansion of the trend toward less direct supervision of individual job responsibilities. This means that jobs will be more interesting and challenging. It also means that employees will be required to make more, and more complex, decisions about auxiliary and manufacturing line functions involving intensified mechanization, instrumentation, and computerization. More and more, the work station is beginning to resemble the cockpit of a 747, not only in appearance but in terms of the capital equipment it controls. We like to think the pilot is acquainted with the core competencies.

Three -- Simple, repetitive jobs increasingly will be performed by machines, and more of the narrowly focused work previously performed by specialists will be accomplished electronically. This means human job functions will be much broader. The average industrial job will require a greater variety of skills, a deeper understanding of concepts, and a more flexible attitude toward the performance of diverse tasks. These changes will involve more teamwork and will require positive personal relationships. Because we are placing so much emphasis on teamwork we feel that employees should have more input in selecting members of their teams. At one of our plants, we have a program in progress under which workers participate in employment interviews and in the selection process. The results so far have been encouraging.

Four -- Continual retraining will be needed as new skills and understanding are required to meet evolving new technologies, in the factory and in the office. The technological revolution will not require that all of us become electronic engineers, any more than Henry Ford's invention created a nation of experts on the internal combustion engine. In fact, as automotive technology advanced, it became less necessary for operators to know much more than how to turn on the ignition and steer. But people had to learn other things, such as how to drive at relatively high speed in traffic, and how to interact with other vehicles. So it is with the new industrial technology. We will need to adjust to technological concepts, but we don't all have to be computer engineers. At the minimum, though, most people will need to feel comfortable with computers and instrumentation.

I fully share the views of the managers and supervisors surveyed in regard to these four points. In addition, I would like to note that, although management sets the objectives, we are giving employees far more responsibility in deciding how to meet those objectives, within reason. For this to work, people need to know more about how their products are used by our customers, who for the most part are industrial companies themselves. So we send plant employees on field trips to customers' plants, where they make contact with their counterparts. In this way they develop a personal interest in keeping products up to specification and on schedule. We want everybody in the company to understand how what he or she is doing fits in with the overall corporate objectives. When a company does involve its people in this way, the results are positive. People do respond. For example, two years ago, when Du Pont needed help in promoting a credit card system for purchase of our "Antron" carpeting, 500 employees from the Textile Fibers Department volunteered for what we called "the Antron Army" and went out and literally sold the idea to carpet retailers, 12,000 of whom signed up. More recently, employees who make our "Nomex" fibers, used in fire-resistant clothing, toured fire stations to model "Nomex" products.

I also agree with the consensus opinion of managers and supervisors that entrants into the work force will need two fundamental characteristics.

First, entrants must be trainable, now and in the future, because we envision a career-long process of on-the-job training and retraining for our employees. Consequently, entrants should have basic educational, personal and interpersonal skills -- the core competencies that are synonymous with trainability.

Second, they should be compatible with the work environment, possessing the personal attitudes and attributes that are essential to effective performance on the job. Among the most important of these attributes are a positive attitude toward team objectives and a willingness to work as part of a team. School sports can be a very useful preparation in this. Other essential personal qualities include a clear understanding of an employer's fundamental requirements and expectations, including consistent attendance and punctuality. Again, these should be learned in school.

At Du Pont we offer a wide range of courses, in instrument training, computer use, electronics, general mechanical work, inventory control, and materials handling, to name a few in manufacturing operations. Training is available to all employees and in many cases it is a requirement. I doubt that any one of our 140,000 employees has not had some exposure to Du Pont training.

Lack of vocational training facilities within corporations and in the public sector is not the fundamental problem, in our view. Job seekers who have the core competencies go on to become good employees, equal to any in the world. The problem is in an apparently increasing number of entry-level people who lack the core competencies. If we can resolve this problem, beginning in grade school, companies such as Du Pont will be able to maintain a U.S. work force that can be competitive in the international marketplace.

The place to begin improving the future competitiveness of the American work force is in the classroom, at the earliest possible point in the education system, teaching clear two-way communication in standard English, and then going on to math and the other disciplines. In attempting to rescue the hard-core unemployed or upgrade the ability of unskilled workers, more attention must be given to the same core competencies. First of all, people have to learn how to learn.

I respectfully urge the Subcommittee to give consideration to this fundamental point, before making recommendations.

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12/3/87

Representative SCHEUER. Mr. Dezell, I have had the opportunity of chatting with you and seeing your extraordinary product that IBM has put out. So, we welcome you here this morning. Please take your 10 or 12 minutes, and we will have some questions.

STATEMENT OF JAMES E. DEZELL, JR., GENERAL MANAGER, IBM EDUCATIONAL SYSTEMS, IBM CORP.

Mr. DEZELL. If you go back and take a look at the history of the IBM company, you will see that the education of our people and of our customers has had a major contribution to our business success over the years. However, if you look at it, you will see that training is expensive and the price for a quality education is going up. So, in order to hold down those costs, we have increased the use of technology in our internal training programs, and today we are using satellites, closed-circuit TV, computers, and interactive video disks.

Initially, we turned to technology to reduce costs. What we have now learned is that not only is technology-delivered education cost effective, but it also is educationally effective, and we are finding that in many cases technology-delivered education provides a higher knowledge retention rate and is delivered in significantly less time.

As I am sure you know, IBM is a high-tech company and we have a full-employment practice. So, training and retraining has been a way of life in the IBM Corp. for at least 30 years.

Mr. Chairman, you requested that I discuss how teaching and learning can be enhanced by technology, and you asked me to review some specific examples of technology-based reading programs. I am going to talk about two of those this morning.

First is a program which you are familiar with, called Writing to Read. In early 1982, we began a joint development project with a noted educator, John Henry Martin, who developed a revolutionary approach to the learning of reading and writing by kindergarden children. In September 1982, we began a 2-year national test in 12 States, 100 schools with 22,000 children, with an independent evaluation from the Education Testing Service in Princeton, NJ.

In 1984, ETS provided their study results, and they said three basic things:

No. 1, on standardized reading tests, the Writing to Read children significantly outperformed their peers by least 15 percentile points.

No. 2, that writing levels of Writing to Read children were considerably in advance of normal expectations.

And No. 3, and probably most important, that these gains occurred across different populations by sex, race, and socioeconomic status.

Today, Writing to Read is being used with inner-city children in Washington, DC, New York City, and Atlanta; with the rural, disadvantaged in West Virginia, Kentucky, and North Carolina; with Hispanic children along the Texas border; and with Native Americans: Navajo at Red Mesa, the Ogalalla Sioux at Wounded Knee, and Native Alaskan children. Of course, in addition to that, literally thousands of middle-class children in every State across the country.

I would like to give you a couple of examples that will illustrate the power of technology. The first example is a little town in North Carolina by the name of Burlington, NC. This is a typical small Southern town. It is 37 percent black, 31 percent school lunch program—and I don't want you to think that this is Scarsdale that I am talking about. In 1983, Writing to Read was put into all six of the elementary schools in Burlington, and I am going to give you some statistics from 1985, which will go back over 3 years.

The entire kindergarten class of 460 children in Burlington, NC, scored an average of 91 percentile on the California Achievement Test, and the mean score was 96 percentile. Now, what that says is that one-half of all the children in Burlington, NC, scored better on the test than 96 percent of the children in the United States who took the test.

Representative SCHEUER. They were up to the mark? They were performing?

Mr. DEZELL. At an extraordinary high level.

Representative SCHEUER. They were higher than average?

Mr. DEZELL. Yes. Higher than 96 percent of the children who took the test in the country.

Representative SCHEUER. Half of them?

Mr. DEZELL. Half of the children in Burlington scored higher than 96 percent of the children across the country who took this test.

Representative SCHEUER. Remarkable.

Mr. DEZELL. There were six individual schools whose scores ranged from 88 percentile to 94 percentile. The school with 94 percentile had the highest percentage of black children.

So, what we have found with technology-delivered programs is that: black children perform as well as white children, poor children perform as well as middle-class children—and even boys perform as well as girls, which is important, by the way, at that age.

In 1985, the first grade was also tested, and these were kids that had come through Writing to Read the previous year. Their scores were 86 percentile in reading, 88 percentile in math, and 90 percentile overall.

When I saw that data, being an old math teacher, I immediately wondered why were the math scores so high, and I asked the teachers. What I expected to get back was something like, "Well, when you teach writing and reading effectively, it helps all of the subjects."

That is not what they said. What the teachers said to me was that Writing to Read causes profound attitudinal changes on the part of the children, attitudes about school, attitudes about learning, and attitudes about themsleves. It was the really dramatic increases in self-image that caused those math scores to go up.

Here in Washington, DC, 45 of the 70 elementary schools are utilizing Writing to Read in their kindergartens. Ms. Floretta McKenzie reports a dramatic reduction in the number of children not ready for the first grade down from 9 percent to less than one-half of 1 percent. What that really says is that she has been able to reduce the number of children who failed kindergarten by 90 percent.

Another way of looking at that would be if you reduced the kindergarten failures by approximately 400 children at $4,600 per child per year, that is a savings to the school system of over $1.8 million per year. So, I think that technology in the classroom can have an economic value in addition to having an educational value.

Representative SCHEUER. May I add to that? I think that is probably an underestimation of the savings, because when a child fails, the costs to society are only just beginning. It is but the first step on the slippery slope. If you can cut that journey off at the pass, you have not only saved the failure expense for that year, but you have saved that whole dismal, depressing, destructive phenomenon of failure in elementary school, high school dropoutism, and the whole life—I don't want to descend too far into cliche—but the life of drugs and violence that is all too likely to follow.

Mr. DEZELL. You can imagine how depressing it is to fail kindergarten and the effect that would have on self-image.

I would like to turn to high school students who cannot read and are at great risk of dropping out. Mr. Martin also developed an adult version of Writing to Read which he calls PALS. And he came to Washington here in 1983 to test his concepts. He went to Cardoza High School here in Washington and asked to see a list of the bottom 10 percent of the readers. He was presented with a list of 120 kids. He alphabetized those, took every fifth one, and made up a class of 24 young people. They ranged in ages from 16 to 19. Their reading levels were third and fourth grade. Their attendance levels were 50 percent.

This was a group of kids who were going to drop out next month or the month after next. They were not going to graduate from high school. He put them through a 20-week program 1 hour a day. At the end of the 20 weeks, 20 of the kids had participated and four of them had slept, as you would expect from that kind of a population. The overall increase in reading level for all 24 of the kids was an average of 27.7 months, and their attendance record during that 20-week period was 98 percent.

Representative SCHEUER. Even for the ones who slept? It must have been a comfortable sleeping environment.

Mr. DEZELL. We took the PALS program and we converted it to the highest form of technology that we had, which was interactive video disk delivery system that we developed for internal use in IBM. We began employing PALS literacy labs in the fall of 1986, and we have about 100 of those in operation now.

Last year, we went to make a documentary film, and we wanted to go back and find some students who had been through this, and somebody had the idea let's go back and find out what happened to those Cardoza kids. Of the 20 who participated, we found that 19 had graduated from high school and 8 of them were in college. To me that is extremely exciting data because it says you can change the direction of highly at-risk young people even as late as high school. And I didn't believe that that would occur before I saw that data.

So, let me give you what we have found from our PALS experience.

First, nonreaders and low readers can learn to read and write in a 20-week period. We found that it is effective for ages 15 through 60. We found that high-tech delivery is highly motivational in and of itself. We found that we can teach word processing and touch-typing skills at the same time that we teach people to read and write, which give them higher self-image. We found that, fully utilized, a literacy lab can turn out about 200 graduates every 20 weeks at a technology cost of less than $50 per student.

And, I think, most importantly, what we found was that dramatic changes in self-concept, in confidence, and self-esteem occur, and actually a physical, mental, and emotional transformation takes place on the part of these students. You can physically see it begin to occur at about the 5th or 6th week.

Let me summarize. The most effective way to deal with illiteracy is to stop it at its source. We must stop it at the kindergarten and first grade level.

Representative SCHEUER. We ought to stop it a couple of years before that at a second year level or a third year level, and that is when my parents helped me. They sent me to a Head Start Program.

Now, you must think that I am not more than 30 years old. You are wrong. 20 years old? You are wrong.

I went to a Head Start Program starting in about 1922 or 1923. We didn't happen to call it Head Start. We called it nursery school or prekindergarten.

But middle-class people have understood the benefits of starting enriched educational environments at age 2 or 3. We have been doing this for 100 years.

We simply denied those benefits to poor people. I have no doubt that that has enormously enhanced the gap between the middle class and the poor because the middle class and upper class children who needed it least got all of that enrichment and the poor children who needed it most didn't.

A lot of those poor children were not learning-ready by the time they reached first grade. The middle-class children would have been learning ready at first grade whether they had had the enriched preschool program or not because they came from homes that were education factories.

So all of these years over this past century we have engaged in this really shameful conduct of denying the kids who needed it the most this quintessentially important preschool experience, while we lavished upon the kids who needed it least of all of these enriched programs. That is a century old immorality that we have to rectify, and the way we should rectify it is by doing the kinds of things you are talking about—extending the school year down to the second year of life or, at the most, the third year of life, with all of these kinds of enriched programs and facilities and services that you are describing.

That is not deducted from your time, Mr. Dezell. Go ahead and finish.

Mr. DEZELL. You might be interested to know of a project that we have underway in Atlanta. There are 11 housing projects in Atlanta. We have put a Writing to Read lab in one of the housing projects, and we are bringing kids from five other housing projects who are 3 and 4 years of age and putting them through the Writing to Read Program.

It is very early, but the indications, the early indications, are that it is very, very successful. We had a group of kids go through last summer, and some of those kids were able to go directly into the first grade and skip kindergarten because of what they learned at 4 years of age.

I think there is tremendous potential in terms of providing intellectual headstart for disadvantaged kids earlier than kindergarten. I think you are on exactly the right point.

What we have found is we think that technology-based programs like Writing to Read can virtually eliminate early childhood failure.

We have found that at-risk teenagers can gain the skills and the confidence that will enable them to effectively participate in the learning process and get their lives turned around.

And we have found that nonreading adults can be revitalized by technology-based learning systems.

So thank you, Mr. Chairman.

Representative **Scheuer**. Thank you for your marvelous testimony.

Both of you have been great, and I am sure I will be saying at the end of the testimony—at the end of the panel that all five of you have been superb.

I must break now for a quick rollcall vote. You probably heard the bells. I will be back in a little bit less than 15 minutes. Okay.

[A 15-minutes recess was taken at this point.]

[The prepared statement of Mr. Dezell follows:]

PREPARED STATEMENT OF JAMES E. DEZELL, JR.

Good morning. My name is James Dezell. I am General Manager of IBM Educational Systems.

Mr. Chairman I appreciate the opportunity to meet with you and the other distinguished members of the Joint Economic Committee on behalf of the IBM Corporation and our efforts in educational technology.

If you look back through the history of the IBM Corporation, you will see that the education of our people and our customers has made a major contribution to our business success.

However, training is expensive, and the price for quality education is going up. To adjust for these escalating costs, at IBM we have increased the use of technology in our internal training programs. These technologies include satellites, closed circuit TV, computers and interactive video disk. We turned initially to technologies to reduce the cost of educational delivery, but have now found our education is not only more cost effective, but more importantly, it is also more educationally effective. In many cases technology delivered education has a higher knowledge retention rate and can be delivered in much less time.

My point, Mr. Chairman, is that training and retraining has remained a way of life at IBM over the years. We are a high tech company with a full employment practice. In order to remain competitive, IBM has made continuous educational investments in its people.

Likewise, IBM strongly believes Mr. Chairman, that to remain competitive America must make significant investments in its workers and in its children.

I became aware of the problems in our schools six years ago, when I served as marketing vice president at IBM. At that time, elected officials and educators began voicing the concern that if we didn't dramatically improve our schools, America would suffer tremendously. Educational policy makers warned that our schools needed to undergo major reform. Many concluded that America's decline in academic achievement could have the effect of weakening our economic strength and competitiveness in world markets.

The more I thought about the subject and tested the problem with others, the more convinced I became that American education was in real trouble and that the effective application of technology could be a part of the solution.

In 1985, I met with the Chairman of IBM and suggested that we put in place an organization to work full time on the application of technology to the educational problems of America's schools. As a result, IBM Educational Systems was formed in April, 1985. When we put IBM Educational Systems in place, the first thing we did was to set priorities for how we should utilize our resources. Our number one priority was literacy. If we could leverage technology to teach young people and adults to read and write, we thought that was the single most important thing that we could possibly do.

Mr. Chairman, you requested that I discuss how teaching and learning can be enhanced by the use of technology. Additionally, you have asked me to give specific examples of the use of computers to teach reading to children and to adults. So, what I am going to talk about this morning, are our literacy programs and the models that are being developed across America using advanced technology to combat illiteracy.

The first program that I would like to talk to you about is a program that can be described as illiteracy prevention. "Writing to Read" was developed with IBM by Dr. John Henry Martin, noted educator and author.

The basis of "Writing to Read" is that a child comes to school with a vocabulary of somewhere between 2000 and 4000 words, and that child can express himself or herself orally in complex statements. So, if we can teach children to write everything they can say, then as a by-product they will learn to read everything they write. Hence, "Writing to Read".

We began the national field demonstration of "Writing to Read" across the United States in 1982. The program was tested for two years in 12 states with 22,000 youngsters. It was independently evaluated by the Educational Testing Service (ETS). The following results were published in June of 1984 by ETS:

* "Writing to Read" is a Powerful and Effective Program
* Significant Gains in Writing and Reading were found with "Writing to Read"
* Teachers liked "Writing to Read"
* Parents liked "Writing to Read"
* Children liked "Writing to Read"

* Reported School Observations about "Writing to Read":

- Increased confidence and independence
- Increasingly self-directed and responsible
- Increased initiative and creativity
- Increased time-on-task and productivity
- Carry-over into classroom subjects
- Positive attitude toward school & self
- Reduced performance gaps within sex, race, and socio-economic status

Since the ETS study in 1984 a number of school districts have been tracking the progress of "Writing to Read" graduates. For example, the Burlington school district that I will discuss is a relatively small district in North Carolina, thirty-seven percent black and thirty-one percent school lunch program. So this is not your typical middle-class suburb, but a cross section of America.

About 450 children enter the school system each year, and there are six elementary schools. Burlington installed "Writing to Read" in all six of their elementary schools in 1983. We now have data on the children from 1983 in the kindergarten, first grade and second grade. And I'd like to review some of the data with you because I think the implications are significant.

In 1985, on average, the kindergarten children in Burlington, North Carolina scored at the 91st percentile on the California achievement test in pre-reading. (See Tables I, II and III).

And when you get under those numbers, it's even more exciting. There are six elementary schools as I mentioned to you, and their scores ranged from an average of 88th percentile to an average of 94th percentile. The school with 94 percentile had the highest percentage of black children. So with "Writing to Read," we're seeing black children perform as well as white children. We're seeing poor children perform as well as middle class children, and we're even seeing boys perform as well as girls.

Now, the next question is: What happens to those kids when they get to the first grade? Does that high level of performance drop off or does it continue? Let me give you the first grade scores of the children that went through "Writing to Read" the previous year. In 1985, first grade: 86th percentile in reading, 88th percentile in math, 90th percentile overall.

One of the things that interested me, was why the math score was up so high. This is a reading program and a writing program, not a math program. I thought that the teachers were going to say to me that when you teach children to read and write effectively they do all their subjects better. That was not the answer they gave.

Instead, they said "Writing to Read" causes a profound attitudinal change on the part of the children: Attitudes about school, attitudes about learning and attitudes about themselves. And they saw dramatic increases in self-image and a dramatic increase in self-esteem. They felt that self-confidence caused the math scores to soar.

Here in Washington, D.C., there are 45 schools that use Writing to Read. Dr. Floretta McKenzie tells me they have seen a sharp reduction in the number of school children who are not ready to go into the first grade, from 9% to less than 1%.

And we are seeing the same progress in other schools:

- Southside Elementary School in Lebanon, Tennessee reports reading scores improving from the 43rd percentile to the 79th percentile on National Achievement Tests.

- In Tampa, Florida the "Writing to Read" schools experienced significantly improved achievement with male students.

Mr. Chairman, this year nearly 1/2 million kindergarten children began their school careers using computers in "Writing to Read". The results have been strongly positive with inner city children in Washington, D.C., New York City and Atlanta; with the rural disadvantaged children in West Virginia, Kentucky and Mississippi; with Hispanic children along the Texas border; with native American youngsters in Alaska, Wounded Knee and Red Mesa; and thousands of middle class school children in every state in the U.S.

Mr. Chairman, in short, as the Educational Testing Service reported in 1984, "Writing to Read" is a powerful and effective program.

Our successful experience with five year old children and "Writing to Read" convinced us that the same technique could be effective with adults. We were right -- but the technological requirements proved to be much more sophisticated.

Dr. Martin had incorporated the "Writing to Read" learning concepts into an adult context which he called the Principle of the Alphabet Literacy System (PALS). Working with Dr. Martin, this adult material was optimized for delivery by a new advanced educational delivery system that was under development in IBM for internal use in training our employees. This delivery system is called InfoWindow, an interactive video disc system that combines a computer with laser discs and a high resolution touch screen for ease of use and learner control.

In May of 1986, we installed the first PALS InfoWindow literacy lab in the Atlanta Public School System. It is being used for young people who have recently dropped out of school to get them back into the educational process. It is also being used for adults at night.

When Atlanta's Mayor Andrew Young learned about the program he said, "I believe that out of the 8000 city workers in Atlanta, there are probably over 1000 who can't read and write." And he began enrolling city employees in the program on city time. To date, 32 Atlanta city workers have graduated from the adult literacy program.

Today, over 100 PALS adult literacy labs are being utilized nationwide. For example: high schools in Flint, Michigan; Columbus, Ohio; Washington, D.C.; Norwalk, California; and, New

York City; community colleges in Tupelo, Mississippi; and state prisons in Virginia and Arizona.

In the PALS literacy laboratories, we are seeing a consistent gain of three years in reading levels during the 20 weeks of instruction. But more that that, we are seeing adolescents and adults who are educationally and emotionally rehabilitated. When an illiterate teenager or adult experiences success in learning for the first time, it has a dramatic and profound effect on re-building self esteem. It is this change in self image that provides the motivation to continue the learning process and obtain the basic skills necessary for success.

I am going to take just a minute and tell you about the Atlanta approach. I think it is worthy of mention because it is comprehensive across the entire literacy spectrum. With the help of Jean Young, Mayor Young's wife, we have established a "Writing to Read" program in a housing project in Atlanta.

Here, preschool children from five other housing projects are brought to the "Writing to Read" center each day and are being taught to read and write. It is a "head start" approach to prepare these children who are at risk. The purpose of this program is to give children a better chance for success when they get to school. There are about 200 children participating in this program today.

Also, Atlanta Public Schools has installed "Writing to Read" in all 83 elementary schools. So every single child who comes to school in Atlanta will start their educational program with "Writing to Read;" and, I hope that will provide them with a "head start".

For older non-readers, the Atlanta adult literacy lab I mentioned is working with young people who are still in school, recent high school dropouts, as well as non-reading adults. The Atlanta model is a comprehensive approach of both prevention in the early years and rehabilitation for adolescents and adults.

So let me summarize. One third of our young people leave school without the skills required for success. The number of our youth not making successful transition to adulthood is a national disaster. One that our nation and industries can no longer tolerate.

But given the right programs and technology, minority children perform as well as white children, poor children perform as well as middle class children, and virtually every child in America can be successful.

Likewise, our nation's non-reading adults and adolescents can be rehabilitated through technology intensive programs.

The estimated 20 million Americans who read below the 4th grade level and the 40 million who lack the basic skills necessary to be effective in an information society, are handicapping themselves and our nation's competitiveness. But this need not be the case, our experience suggests that technology based literacy programs can provide basic skills to millions of Americans and enable them to become contributing citizens.

Mr. Chairman, in my opinion, for the culturally different child and adult, technology has the potential to serve as a great educational equalizer. Thank you.

TABLE I

CALIFORNIA ACHIEVEMENT TEST
BURLINGTON CITY SCHOOLS
Spring 1983, 1984, 1985

Kindergarten
Level 10
K.8

	NO. STUDENTS	LISTENING		TOTAL ALPHABET		LETTER SOUNDS		TOTAL VISUAL & AUDITORY DISCR.		TOTAL PREREADING		MATH	
		S*	%ile	S*	%ile	S*	%ile	S*	%ile	S*	%ile	S*	%ile
1983K BURLINGTON CITY	427	5	54	7	87	7	83	6	76	7	85	6	71
1984K BURLINGTON CITY	482	5	54	7	75	7	87	7	84	7	86	7	78
1985K BURLINGTON CITY	460	6	73	7	87	8	94	8	91	8	91	7	78

TABLE II

NORTH CAROLINA BASAL TESTING PROGRAM
CALIFORNIA ACHIEVEMENT TEST
BURLINGTON CITY SCHOOLS
Region 5
The State and the Nation
Spring 1984

First Grade

1.6

1983K

SCHOOL	MEAN I.Q.	NO. STUDENTS	READING G.E.	READING %ile	SPELLING G.E.	SPELLING %ile	LANGUAGE G.E.	LANGUAGE %ile	MATH G.E.	MATH %ile	BATTERY TOTAL G.E.	BATTERY TOTAL %ile
BURLINGTON CITY		465	2.5	87			2.3	80	2.5	88	2.5	#1 90
Region 5		14,509	2.0	69			1.9	64	2.2	77	2.0	74
State Average		83,031	1.9	65			1.9	61	2.1	74	1.9	70
National Average			1.7	50			1.7	50	1.7	50	1.7	50

Spring 1985
1.7

1984K

BURLINGTON CITY		485	2.5	86					2.5	88	2.5	#1 90
Region 5		14,402	2.0	68					2.1	76	2.0	73
State Average		82,174	1.9	64					2.1	73	1.9	69
National Average			1.7	50					1.7	50	1.7	50

TABLE III

NORTH CAROLINA BASAL TESTING PROGRAM
CALIFORNIA ACHIEVEMENT TEST
BURLINGTON CITY SCHOOLS
Region 5
The State and the Nation
Spring 1985

Second Grade

2.7

1983K

SCHOOL	MEAN I.Q.	NO. STUDENTS	READING G.E.	READING %ile	SPELLING G.E.	SPELLING %ile	LANGUAGE G.E.	LANGUAGE %ile	MATH G.E.	MATH %ile	BATTERY TOTAL G.E.	BATTERY TOTAL %ile
BURLINGTON CITY		459	3.8	80			4.1	85	3.5	83	3.7	#1 86
Region 5		14,061	3.3	64			3.5	74	3.3	70	3.3	72
State Average		19,949	3.2	62			3.4	71	3.3	69	3.2	69
National Average			2.7	50			2.7	50	2.7	50	2.7	50

Representative **Scheuer**. Back on the record.

I also have to express my continuing disappointment with the press, both the printed media and the electronic media, for not really covering these hearings. It is an inherent problem when you talk about an underlying issue that doesn't involve hot news breaking today.

No matter how catastrophic and cataclysmic the result may be 2, 3, 4, 5 years from now, if it is just a trend and not hot news breaking today the press tends not to cover it.

It is a bloody shame because I would warrant that of all the things going on in the Congress now few, if any, of them are as important to our country's future as the messages that you witnesses are giving us today.

But that is the nature of the electronic and the printed beast. It is a shame.

Now, we will continue with our witnesses.

Mr. Robert Glover is a research associate at the Center for the Study of Human Resources at the LBJ School of Public Affairs at the University of Texas at Austin.

We are delighted to have you. Please take your 10 or 12 minutes.

I am trying to get through the last three witnesses as quickly as possible because I have some questions for Mr. Heckert and he has to leave at 11 o'clock. If it looks as if we are not going to get through, maybe I will take a little window of opportunity, Mr. Heckert, and ask you a few questions before the last witness.

Mr. **Heckert**. Thank you.

Representative **Scheuer**. Mr. Glover, please take your 10 minutes.

STATEMENT OF ROBERT W. GLOVER, RESEARCH ASSOCIATE, CENTER FOR THE STUDY OF HUMAN RESOURCES, LYNDON B. JOHNSON SCHOOL OF PUBLIC AFFAIRS, UNIVERSITY OF TEXAS AT AUSTIN

Mr. **Glover**. I have been instructed to give you a 10-minute overview of training and retraining policies in the Federal Republic of Germany this morning. That is a problem I would have trouble doing justice to in 10 hours, but I want to at least get you started and stir this group into further investigation of the subject because I think it really merits your consideration. I commend you for including it as part of these things.

As you know, the Federal Republic of Germany—one of our major competitors—considers training and retraining of their work force as a genuine investment. It is more than rhetoric. It is a premise for action.

Interestingly enough, they, as we do, define education as a state responsibility. It comes under the responsibility of the Länder. However, vocational training in firms is defined as a national responsibility because of its close connection to national economic performance.

As a matter of fact, the Vocational Training Act of 1969, which is their fundamental framework, is defined as part of the national commerce and industry code, rather than the education code. A major premise is to improve the "life chances" of the individual as well as to improve the Nation's economy.

The key point that I want to make this morning is that Germany has a well-developed system for linking noncollege bound youth to careers and providing them with occupational skills. That comes as a big contrast to our system, which is highly oriented in college training. We tend to ignore the 75 to 80 percent of kids who don't go to college and, for sure, the 25 percent who don't even complete high school.

Germany has less than a 10 percent dropout rate through compulsory schooling plus some kind of apprenticeship and vocational training. It is almost impossible for a German youngster to get into the labor market without obtaining some sort of vocational credentials.

In contrast, in our system those who don't complete high school or those who stop at high school graduation have to stay in a sort of "aging vat" until they are 20 to 24 years old before they can really compete for any kind of a serious job.

I think this is quite an alarming situation, particularly given the dramatic demographic outlook that we face, as witnesses have laid out in previous days in this hearing.

Let me give you a brief profile of key features of the German training system in these respects.

There is an initial training system or apprenticeship system, called the "dual system" because it involves training in school as well as training in a firm. So there are two aspects to it. The German initial training system, along with those in Switzerland and Austria, is the best apprenticeship system in the world. Literally 50 to 60 percent of all school leavers go into an apprenticeship of one kind or another.

Compulsory schooling in Germany ends at 15 years old, and apprenticeship begins at 16 and lasts typically for 3 years, and during that 3-year period a youth goes to a part-time vocational school 1 day a week and works on a job or in a workshop for the other 4 days, and they are paid by the employer during that period.

I might also mention that—parenthetically—that college training has become extremely important in Germany as well. Germany offers free colleges, and since 1964, the proportion of youths enrolled in college has risen, so that by 1982 the percentage raised to 17 percent. So Germany is competing with us on the college level as well as in the area of noncollege youth.

The initial training system is governed, as I said, by the Vocational Training Act, under which are produced training ordinances. These ordinances are formulated in a collaborative way with employer involvement and worker involvement. Training ordinances include three essential elements.

One is a description of a carefully chosen set of skilled occupations. There are 429 occupations now considered apprenticeable across all branches of industry.

The list of apprenticeable occupations has been reduced from about 600 in 1970 just about 17 years ago. Apprenticeable occupations have been consolidated to make sure that the training keeps up with technological and other changes in the workplace and provides transferable training; that is, it makes people flexible and more amenable to further training and retraining. Thus the description of the skilled occupation is the first element of each training ordinance.

The second element is the training outline. Germany develops an outline of training plans based on job analysis for each apprenticeable occupation.

And, third, Germany establishes national examination requirements in each occupation. As part of national law, employers operate under these training ordinances and agree to abide by them and offer apprenticeship training that meets the full requirements of the training ordinances.

Three primary characteristics about Germany's initial training system are really important.

One is the emphasis on quality education and training. The German system prepares young people from an early age to work in a disciplined adult work environment and to take work seriously.

German apprenticeship offers substantial preparation in occupational skills. Many American youths of the same age have jobs, too, but they are typically in dead-end positions, requiring little skill and offering little occupational training. A study made by Michael Borris a few years ago showed that 46 percent of the jobs held by 16 to 21 year olds required no training at all; that is, they could be learned with just a simple demonstration; 22 percent of the jobs required less than 30 days training; and 19 percent required less than 3 months training. Only 14 percent of the jobs actually required a high school diploma, despite the fact that many in the age category 16 to 21 were high school graduates.

So what incentives do we provide our high school graduates, who stop at high school graduation? They typically receive the same kinds of jobs available to high school dropouts or high school students. I think we have to question the incentives implied here.

A related feature of the German system is that this high quality training for noncollege bound youth is not stigmatized as a dumping ground like our traditional vocational education programs are. In fact, many German youths combine college training with vocational training. Apprenticeships and college training are often combined in the insurance and banking industries, for example.

The second key characteristic of the dual system, the German apprenticeship system, is the high participation by employers in the private sector. Literally about a quarter of all of the employees in the country offer an apprenticeship training slot. In the last 10 years, because Germany is facing a baby boom, employers have almost doubled the number of training slots that are available to youths.

Industry is involved in all of the decisionmaking processes in this system as well as in the implementation of the training. In Germany, the private sector is the primary vehicle through which occupational training is implemented. There is considerable collaboration among firms who share training information and techniques and who join together in developing interfirm workshops so that they can offer the full range of training to apprentices under the requirement of the training ordinances.

And the third characteristic of the initial training system is that it offers a good transition from school to work. Germany has a strong vocational guidance component operated by the Public Employment Service to get youths into apprenticeships.

An estimated half of all apprentices stay with the firm to which they are apprenticed, and a vast majority find jobs in the trade which they learn. In other words, what we are talking about here is linking school with work to produce structured learning.

In sum, the initial training system in Germany for noncollege bound youth is among the strongest in the world.

Germany also has a very significant system of further training and a variety of other training for adults. Like initial training, further training is primarily privately implemented. The Government provides funds only to correct the shortcomings of the private market and to deal with groups that private employers do not deal with.

The further training system is built on the initial training system; that is, the same institutions, the competent bodies that make up the training ordinances, are also involved in training adults. Having available all of the detailed information including job analysis and curricula developed for 429 occupations puts the authorities in a better position to be able to offer significant adult training and retraining as well.

All together, about 3 percent of the work force each year in Germany is in some form of adult training, and this figure doesn't even count the totally private training that goes on in firms that is not regulated by the Vocational Training Act.

Adult training is funded in interesting ways. For example, the Public Employment Service, entitled the "Federal Employment Institute," is funded under a payroll tax that is paid both by workers and by employers. This payroll tax funds the unemployment insurance system as well as a variety of adult education/training programs. It funds workshare and several other programs that enable the Germans to really maximize their adult education and to help make lifelong learning a reality.

The German system is not perfect or problem free. Right now, as you may know, Germany is suffering relatively high unemployment rates. Their unemployment rate is around 7 or 8 percent, which is very high for them. German experience has demonstrated that employers won't take care of long-term unemployed workers, or those who need a lot of remedial assistance, and so this is where the Government has to step in. But in general, the system works extremely well.

I don't think it is completely transferable here to the United States on a wholesale basis, but some of the principles might be, and I will just point out a few of the points that seem to me to be important.

One is that the Public Employment Service plays a central, integral role. The way that its funding mechanism works is very important.

The second major point is that Germany has established through public/private collaboration a set of institutional networks for training. German employers pool and share information on training, come to agreement about what kind of training is necessary, and offer training that is transferable, that makes people flexible and capable of being retrained.

In summary, Germany has a systematic training for those who do not go on to college, implemented primarily by the private sector under public/private collaboration. Germany has an extremely good initial training system—its apprenticeship system—which serves as a grounding for further training, and the multiple variety of other available training for adults.

Thank you very much.

Representative SCHEUER. Thank you very much, Mr. Glover.

[The prepared statement of Mr. Glover follows:]

PREPARED STATEMENT OF ROBERT W. GLOVER

The Need for an International Perspective

Mr. Chairman and members of the Committee, I want to applaud your concern for including as part of these hearings consideration of education and training systems in other industrial nations. Americans tend to have a provincial outlook on education and training. Few American researchers have devoted serious attention to training systems abroad. Some may think that training practices are not be transferable across international boundaries due to differences in the cultural, political, and social context. While such factors are important, ideas from abroad can and should have a hearing in our own marketplace. Indeed, how can we even aspire to have a "world-class" education and training system without ever bothering to examine the learning systems in other nations--especially our chief competitors?

My purpose this morning is to present a brief overview of training in one of our primary competitors--the Federal Republic of Germany. While I cannot do this topic justice in the limited time allotted this morning, I hope that the information presented will stir further investigation on the part of the Committee and others interested in the vital subject of improving the quality of the American work force.

Training as an Investment

The Federal Republic of Germany, like most European nations and Japan, considers training and retraining of its work force as a genuine investment. This is not simply rhetoric--but a premise for action. Thus, while education is considered the responsibility of the Länder (state) governments, vocational training in firms is defined as a national responsibility because of its close connection to national economic performance.

German Apprenticeship: Providing Workers A Good Beginning

The Federal Republic of Germany and its neighbors, Austria and Switzerland, are widely acknowledged to have the strongest apprenticeship training systems in the world. In these countries, it is almost impossible to leave school without moving into some form of apprenticeship or other vocational training. More than half of the youths leaving compulsory school enter apprenticeships. In these same countries, the unemployment rates for youth are closer to adult unemployment rates than any other major Western industrialized country except Japan.

In Germany, apprenticeship is called the "dual system" because it includes training both in school and under a written contract with an employer. An apprentice typically spends one day a week in a vocational school and the remainder with the employer with whom he or she has a contract. Practical occupational training takes place primarily with the employer. Related training and education are provided in part-time schools that all school leavers must attend until they are 18 years old. Some apprentices attend the vocational school full-time for several weeks on a block basis.

Many of the larger firms conduct workshops to give apprentices "hands on" experience with the tools before they work in production. With financial support and encouragement from the federal and state governments, and usually under the sponsorship of the local Chamber of Handicrafts or Chamber of Industry and Commerce, smaller firms in many areas have banded together to operate inter-firm training workshops. This pattern is especially common in the metalworking trades.

In Germany, youngsters typically enter the dual system immediately upon completion of their compulsory full time schooling at age 16. Those who leave full time schooling must additionally participate in part-time vocational education. The period of apprenticeship is at least two years and more commonly lasts from three to three and a half years. Employers pay apprentices monthly training allowances, which increase as apprentices progress through their training to reach, near the end of an apprenticeship, to about half of what skilled workers earn. The training allowance is paid by employers even for the time apprentices spend off the job in workshops or vocational schools.

Most youngsters find apprenticeships on their own. The public employment service (Federal Employment Institute) has a special unit to counsel and help match youngsters to apprenticeships.

Appealing Features of German Apprenticeship

Several aspects of the German apprenticeship system are particularly attractive to American observers, including the high degree of industry participation, the keen emphasis on training, and the way apprenticeship links youth jobs with adult jobs.

Broad industry participation -- It is estimated that 400,000 German firms are sponsors of apprentices. This amounts to nearly a quarter of all the firms in the country. Asked why they are so involved-in training young people, employers in Germany typically respond: "It is not only our social responsibility, it is in our own interest."

Most German apprentices have contracts with individual firms, but the involvement of industrywide organizations is also important. In many industries, virtually the only way that small businesses can provide significant training is through collective participation. Often this participation is accomplished the the sponsorship of employer organizations such as the Chamber of Handicrafts or the Chamber of Industry and Commerce. The Chambers inspect and certify that firms can offer suitable training to apprentices.

Industry representatives participate in every decision-making function in the "dual system" from determining which occupations should be apprenticeable, to designing the training, to devising examination and certification procedures. The Federal Institute for Vocational Training and the Federal Employment Institute both are administered by tripartite committees composed of representatives of employers, workers, and the public. They also make use of numerous technical task forces and committees, of similar tripartite composition.

Emphasis on Training -- German apprenticeships are more than a means of introducing youths to the world of work. Although they do aim to build good work habits, the primary emphasis is on building job skills. German employers share information about training. Instructional materials and effective teaching techniques are freely traded among businesses that are otherwise fiercely competitive.

Concern for excellence has led to several checks on the quality of apprenticeship training. First, any employer who wants to hire an apprentice must be found qualified by the local Chamber. Second, apprentices must pass intermediate and nationally devised final examinations given by the Chamber.

Exams generally contain written, oral, and practical tests. In addition to certifying the occupational qualifications of the apprentice as a skilled technician, a clerk, or a journeyman craftworker, examination results also indicate the success of the training program. If it is determined that an apprentice failed an examination because of inadequate preparation by the employer, the firm can lose its authorization to train apprentices or face other reprimands from the Chamber.

Finally, through the Chamber, instructors from industry are trained and certified as qualified to teach apprentices. Instructors are tested on their ability to teach as well as their knowledge of the trade. Since the 1930s, master craftworkers have had to demonstrate their ability to teach as part of the *meister* examination. Since 1972, the Vocational Training

Act has made it obligatory for all company training personnel to have a teaching qualification.

From the viewpoint of the individual worker, skill training is highly valued. It is a mark of distinction to achieve the title of "skilled worker" or to become a *meister.* Skilled workers are favored over unskilled workers in several respects, increasing the motivation to pursue skill training.

A Bridge Between School and Work -- In Germany, apprenticeship is viewed as the link between schooling and work. The dual system gives youth an early and significant exposure to employment and an opportunity to experience the realities of working life at first hand. It provides a chance to work and receive an income, an adjustment period to make the transition from school to working life, and a chance to receive training in salable skills. At its best, the dual system trains adolescent workers in the latest industrial techniques on modern equipment--equipment that perhaps only industry can afford. Also, it prepares young people from an early age to work in a disciplined environment and to take work seriously. Such workers are considered most easily trained and retrained by employers.

The German experience in maintaining low rates of youth unemployment has been impressive by any measure. Indeed, in the past unemployment rates for youths have been even lower than the national average rate of unemployment in Germany. Although German labor markets have felt the effect of a recent bulge of "baby boomer" entrants, and although there are some differences in unemployment rates due to statistical practices, unemployment rates for youths in Germany have remained low relative to almost any other Western industrialized country. Many attribute a large measure of the credit for this accomplishment to the German apprenticeship system.

Further Training

Just as the content of further training builds upon the subject matter of initial training, further training for Germany's adult workers is strongly connected to the German dual system. Generally the same institutions -- such as the national curriculum committees and "competent bodies" who are responsible for organization and certification of apprenticeship training -- have roles for further adult training. The result is that a career ladder of *meister* and foreman training and certifications is available to the ambitious production worker.

Other Vocational Training Opportunities for Adults

In addition to significant opportunities for further training within firms and external establishments in accordance with the Vocational Training Act (and beyond the Act), German workers can attend Länder schools (Fachschulen) for occupational preparation beyond apprenticeship.

A variety of remedial training and preparation for occupational training also can be found in special retraining centers, within firms at the request of the Federal Employment Institute, in adult education centers sponsored by Länders, and in vocational promotion centers for vocational rehabilitation of injured workers

Through the Employment Promotion Act of 1969, the Federal Employment Institute provides grants and loans for establishing, equipping, or expanding group training workshops, which serve to provide vocational training for apprentices and adults, further training, or retraining. In special cases, funds are also provided to cover maintenance costs of these facilities. Most of these workshops are operated through the Chamber of Handicrafts or through Chambers of Industry and Commerce.

In addition, the Federal Employment Institute supports Centers for the Promotion and Development of Vocational Training. A model for such Centers is located in Essen. The Essen Center offers a variety of training, including information seminars for the long-term jobless to motivate them to participate in vocational training and to inform them about opportunities to improve their prospects in the labor market; orientation and assessment, basic stage classes, and distance learning to prepare workers with deficiencies in their qualifications for subsequent retraining; and a variety of programs for retraining, update training, and practice workshops for adults. It also provides supportive services such as counselling. It conducts research on the success of training, and it provides further training to teachers.

The Federal Employment Institute also funds training for a variety of groups with special problems, such as handicapped individuals, inmates of juvenile detention centers, and youth migrants. Youths with labor market problems are assisted with preparation to enter apprenticeships.

Besides assisting the development of industry training institutions, the Employment Promotion Act provides for individual financial assistance to workers for further training or retraining for a different occupation. Financial aid can be given to maintain or enlarge professional capacities, or to adapt worker skills to technological development, or to make professional advancement possible. The applicant must have either completed vocational training plus three years of professional work, or he or she must have worked for at least six years. The applicant must have paid unemployment insurance contributions for at least two years during the previous three years. The program operates along the lines of our own "GI Bill" in that workers can exercise some choice in selecting the accredited institution in which they receive their training. Costs such as tuition, instructional materials, and travel expenses can be reimbursed in part or in full. In addition, living allowances can be paid to support the families of individuals undergoing training. Funds of the Federal Employment Institute come from contributions paid by employers and workers, so there is established a kind of self-financing of adult vocational education. The Institute also administers the unemployment insurance payments.

In addition, under some Länder educational leave laws, according to collectively agreed regulations, employees are required to pay social insurance contributions and have, in return, a collectively agreed right to educational leave.

Lessons from the Federal Republic of Germany

While Germany clearly pays more attention to systematic training and retraining of its work force than does the U.S., I am not advocating wholesale adoption or slavish imitation of the German approach. Even the dual system has significant shortcomings. For example, critics point out that it constrains children of 10 and their parents to decide future career paths in generally irreversible ways. The system has also failed to provide equal job opportunities for women and for children of migrants. And despite the various certifications and examinations, the quality of training varies considerably by firm.

The important point is that Germany pays much greater attention to occupational preparation and recurrent education for non-college bound workers. These workers are largely ignored in the U.S. Without public encouragement, few employers will invest significantly in workers who are likely to walk off with the investments.

Our own apprenticeship system is in need of a comprehensive examination by an independent, impartial, bipartisan, blue ribbon National Commission with participation from employers, workers, and govenment representatives, designed to generate consensus about directions for action in the future. In response to a request from officials at the U.S. Department of Labor, a proposal for such an initiative is being developed by the State Labor Commissioners and State Apprenticeship directors with input from industry and labor officials. It will soon be circulated for comment and endorsements and submitted to a national foundation for funding.

In considering the transferability of institutions across international boundaries, care must be taken to recognize cultural, political, and social differences. Nevertheless, variations of some general ideas may have applicability in America, including the following:

(1) Germany recognizes the close connection between human resource development and national economic performance and acts on it.

(2) The German approach to training is based on a tripartite "social partnership" between workers, business, and government. Collaboration and consensus are important elements to the effective functioning of the system. The country's training systems rely on the broad-scale participation from the private sector.

(3) The public employment service (Federal Employment Institute) plays a central and integral role in human resource development in Germany. It not only matches workers with jobs but also matches workers with training. The Federal Employment Institute is closely connected with training and even serves as a funding source for workers to finance training.

(4) Curriculum, examinations, and certification are developed at the national level through public-private collaboration.

(5) In the design of training, Germans have long emphasized flexibility and mobility of workers. This is a key reason for designing occupational training on a national basis. It is also a major reason for designing training to be sufficiently broad to permit transferability.

(6) Germany has developed national institutional networks for firms to collaborate in training workers. With a few minor exceptions, no such networks exist in U.S. industry for human capital development among American workers. Although America seems to be accepting idea of joint ventures among firms in an industry for purposes of research and development to improve international competitiveness (e.g. MCC and Sematech), such joint ventures are not even being considered in the area of training. Even the human resource implications of the innovations produced by MCC and Sematech are ignored. In this regard, it should be noted that the United States is the only English-speaking country in the world without a system of national industry training boards.

I want to thank the German Marshall Fund of the United States for a partial travel grant which sparked my initial interest in this topic. I am also indebted to Professor Joachim Münch of the University of Kaiserslautern, Roy Butler of the Ohio State University, and Ray Marshall at the University of Texas at Austin for providing useful information. Any omissions or errors in this statement, however, are mine alone. The views expressed here do not necessarily reflect the official position of the Lyndon B. Johnson School of Public Affairs or the University of Texas at Austin.

Representative SCHEUER. I am going to interrupt the sequence now to spend a few moments with Mr. Heckert because he has to leave by 11.

Mr. Heckert, in your testimony you indicated that Du Pont employs maybe 40,000 workers abroad in 50 other countries.

Mr. HECKERT. That is correct.

Representative SCHEUER. To what extent does Du Pont get involved in the normally mandated training programs that these countries have established?

Mr. HECKERT. It is my impression—and I will have to check this with a little more research—but it is my impression that in Germany, for example, which we have just discussed, the training we do is really only that required to carry out our work. We are not involved in any kind of extensive vocational training in our plants in that country.

I will have to check that, but it is my impression that we do not have an elaborate structure of the sort that he has described.

Representative SCHEUER. So to your knowledge, Du Pont would not be involved in mandated training programs?

Mr. HECKERT. If it is mandated, I am sure we are involved, but I am not aware of much of a program of that sort.

Representative SCHEUER. Undoubtedly, you have had experience in a wide variety of countries if you are doing work in 50 countries abroad.

In South Korea and Taiwan they apparently have well-disciplined and well-educated work forces with literacy approaching 100 percent and they work in a very disciplined way at about one-fifth to one-tenth of the wages of American workers.

How can our country afford to compete? How can we compete with these countries in the production of manufactured goods, sophisticated products of all kinds—consumer electronics, cars, what not—if their workers are just as skilled as ours and maybe disciplined to work a little bit harder and yet earn 5 to 10 times less than our workers?

Isn't the market going to say to us either you have to improve your worker productivity significantly so that they are worth more or you are going to have to cut wages; otherwise, you are not going to be a competitor on the world stage?

Mr. HECKERT. You are exactly right, and to complicate matters——

Representative SCHEUER. I don't want to put words in your mouth.

Mr. HECKERT. It happens to be a subject that I have addressed even more than education.

I am extremely concerned about the trade imbalance and what it is doing to our industrial infrastructure.

To make matters worse, the technology is freely available around the world. That used to be our big crutch. We had better technology than anybody else, and because we had better tools to do our work our people were sufficiently more productive to justify the increased compensation.

That advantage is dwindling, if in fact it still exists. It certainly doesn't exist opposite Japan or Germany.

Capital, which used to be a great resource for us and not freely available to folks like the Taiwanese and South Koreans, the world is awash with capital.

Representative SCHEUER. Especially Taiwan. They have the largest balance of hard currency in the world, I believe something like $60 or $70 billion.

Mr. HECKERT. So it is turning out that this discrepancy in compensation is getting to be a more and more troublesome thing with respect to U.S. competitiveness.

Now, our response has been predictable. We are doing everything we can to make our operations more efficient. We are trying very hard to provide our people with the very best tools, but it is literally true that in this world we still need some refined techniques to ensure that trade is in the exchange of goods and services—for goods and services and not for debt.

Now, that is a fairly simple statement, but that really is extremely important.

As long as we are selling them something American made for something Taiwanese made, we are not in serious trouble, but when we get in the situation where we are willing to incur very large debts annually just to enjoy the lower cost goods produced abroad, eventually that causes enormous problems, and that is where we are.

Representative SCHEUER. Particularly when you are borrowing $150 billion or so annually from abroad to pay for the enjoyment of the goods they produce abroad.

Mr. HECKERT. Absolutely.

Representative SCHEUER. Isn't that a no-no for the long-term goal?

Mr. HECKERT. It is absolutely idiotic, and it is enormously destructive. We simply have to address that problem.

Now, even though we have both defined the issues and problems, we have not suggested remedies. They are not easy.

Representative SCHEUER. I am suggesting that we have to enhance revenues.

Mr. HECKERT. Remedies. Excuse me.

I have no problem with that. We will have to do something about that, yes.

Representative SCHEUER. Mr. Heckert, you just mentioned that our industry needs the very best tools and that we need refined techniques.

To produce the workers at the postsecondary level who are going to man our factories and man our productive facilities, might it not be very well to think about applying the very best tools and the most refined techniques to preschool education?

I am going to ask this to Mr. Dezell after you leave, but I can't help asking you.

Can't we provide the leadership in this country to give Mr. Dezell's product and other comparable products from other sophisticated companies to each school and every disadvantaged kid?

Mr. HECKERT. It seems to me if Mr. Dezell's story were told around the country there would be a hue and cry to get this kind of thing implemented. I think it is a marvelous story.

If there is no question that the learning process begins well ahead of kindergarten or the first grade and that those kids that come from families that provide that kind of support and enrichment and education, then they have an enormous advantage and those that don't, for whatever reasons, that is just a crushing disadvantage.

I think to the extent that we can use the kind of technology that was described, the extent to which we can convince parents that families are important and that reinforcement at very early stages is crucial to a child's development, all of that is extremely central to our problem.

Representative SCHEUER. Do you think we could harness the business community of this country behind an effort to fund the provision of the sophisticated learning tools to preschool programs and elementary and secondary school programs, particularly in disadvantaged areas, serving minority kids and other kids from disadvantaged homes?

Can you see the Nation's business leadership getting behind a program?

Mr. HECKERT. I hope we already are. I would remind you the people pay for everything, and we need their support, too.

Representative SCHEUER. Of course they do, but the business community has a great deal of credibility with the people. You know, there are people around Washington who talk about the Democrats as the big spenders—spend, spend, spend, spend, tax, tax, tax, tax. So we get a little punch drunk. We get a little sensitive about endorsing spending programs.

But it seems to me that, putting politics aside, the business community should see the advantage and the cost effectiveness of spending the comparatively small amounts of money on the kind of learning technology that Mr. Dezell talked about. Wouldn't they support the development of a program to meet this need?

Mr. HECKERT. I think it is a very easy call, and I think you will have business support.

I repeat, after all is said and done, we still need the people with us. They pay the taxes.

Representative SCHEUER. You are absolutely right, of couse. No program, whether you spend hundreds of millions of dollars, or even billions, can ever succeed without popular support. This is a democracy, and sometimes it hurts a little and sometimes we feel a pinch when these value judgments go to the people, but it is amazing how often the people are right and the politicians are wrong.

I want to cite for your interest a Lou Harris poll that stated the question:

Would you be willing to pay a 2-percent education tax on your earnings if the tax were to finance something new and different in education that really would work and would make a difference?

Mr. HECKERT. Very easy.

Representative SCHEUER. It was about 2½ to 1 in favor of it.

Now, that doesn't mean that they would pour an amount of money equal to 2 percent of their incomes down the existing sinkholes, which is the way people perceive it in the education system.

You look at New York and when you say 110, 110 is enough to send people into utter depression. That is 110 Livingston Street, the headquarters of the board of education, and the board of education and our education system in New York could almost be described as dysfunctional, totally ineffective.

It is not quite true because we still have our quota of national merit scholarship winners. But as far as low income, disadvantaged kids are concerned, it is at least fair to say that we don't do anywhere nearly as much for them as we ought to be doing and as we could be doing with the kinds of programs that you and Mr. Dezell are talking about.

Mr. HECKERT. I have been saying for decades that people will pay for good education. What they are not sure of is that just pouring money on the problem will improve the situation. So we need to establish credibility with programs of the sort you have heard described here today, showing that they work and that they are affordable.

Business has been very concerned about this. We spend a lot of money trying to help educators do their job better, and we will continue to do that.

I don't think, however, that you want business to take on the responsibility of controlling education in this country. I think that is——

Representative SCHEUER. I don't think we would ask you, Mr. Heckert. You wouldn't want to be asked, and we wouldn't want to ask you, and we don't want the Federal Government to control it.

I want Congress to help out with some funding, and I want Congress to provide some options, but I don't want Congress or the executive branch to control education. That is a State/municipal function.

Mr. HECKERT. It is my conviction that programs that work will get funded, and we will help you any way we can.

Representative SCHEUER. Let me ask you just one question. You mentioned in your prepared statement that "In grooming minority students for careers in science and engineering we like to begin at the seventh or eighth grade with tutoring and trying to get parents involved."

Tell us how you do that. How do you get parents involved?

Mr. HECKERT. We have had a program for many years now that centers around our plant sites and other places where Du Pont has a presence. We rely on the employees in those areas to find out who these kids are that have promise, to get the children themselves and their parents interested in special efforts that would make them fully competitive in not only high school but college and graduate school.

Representative SCHEUER. These are kids you perceive to have the making of scientists and engineers?

Mr. HECKERT. Precisely.

Representative SCHEUER. Do you find that most of them come from middle-class families, and not from the poorer families?

Mr. HECKERT. Obviously, there are more in the middle-class situation, but sometimes, you know, a relatively low paid hourly employee will have a promising son or daughter that we can see has these skills or these attitudes that would make them successful and we do everything we can to work on both the child and the parents to see if we can't get them to agree to commit to the little extra effort that is required to be fully competitive.

Representative **Scheuer**. I suppose to the extent that these promising young kids who could be on a professional track and end up as graduate engineers, scientists, and mathematicians come from middle-income families you are going to have an easier job persuading the parents?

Mr. **Heckert**. No question about it.

Representative **Scheuer**. How do you manage? How do you cope with the parents who are really living in poverty, who are not particularly educated themselves, who don't have a high school education, and who have produced a very promising young boy or girl who you think could make it? How do you cope with those parents? How do you motivate them?

Mr. **Heckert**. I don't have enough in-depth knowledge to do justice to your question. My impression is—and that is all it is, is an impression—that we largely rely on the relationships that exist between our employees and parents such as you describe to convince those parents that there is a real opportunity here, and clearly you can't just go in and say, you know, you have got to do this, you have got to do that.

You have to offer concrete assistance, and we offer programs—at least we identify programs that will be helpful. We offer financial support. Eventually we will offer scholarships for college and graduate school if the young folks get that far.

We do everything we can to be helpful, but in the final analysis the young person and their parents have to agree that they want to put out the effort that is required to make good things happen if good things are going to happen.

Representative **Scheuer**. You are picking young boys and girls—I will not even say men and women—you are talking about picking kids in secondary school?

Mr. **Heckert**. If we can identify them, we pick them as toddlers.

Representative **Scheuer**. You would pick them as toddlers and then when you found a child who had the makings for it you give him and his family whatever support and assistance is appropriate to liberating that child to exercise his talents to the maximum degree.

This is a real meritocratic program—that is selecting kids of potential excellence at a young age. Do you think that such a discriminating program is the kind of program that really only private industry could carry out, or is this conceivably a program that government could fund?

Mr. **Heckert**. It is conceivable that government could fund it. Communities would have to implement it because it depends pretty heavily on local knowledge.

And one other comment I would like to make—well, you describe it as a meritocracy. That is right. That is what it is today. But our goal is to get some role models to demonstrate without question that the minority children can do this and do it well and benefit enormously from it, so that we can have more and more of these young people genuinely interested in that kind of education.

We need them in our factories and in our laboratories. There are not nearly enough around.

Representative SCHEUER. We desperately need role models among young minority kids and minorities at all ages. We had a morning of testimony from teachers and high school principals indicating that there are problems of attitude and behavior in the minority community. An ethic has developed that it is not chic, it is not macho, it is not "with it" to succeed in education.

Failing is the way the kids stick their thumbs in society's eye and their way of expressing their resentments over what they perceive to be the unfairness of society. It is a terrible thing for society and it is even a more terrible thing for the kids who believe that, because when they produce this pattern, they are going to fail. And it isn't pleasant, and it isn't good, and it isn't macho ultimately to fail in our society.

So it is tremendously important to produce kids in the minority community who are on the path of success.

Mr. HECKERT. Absolutely.

Representative SCHEUER. And hopefully, as those kids select themselves out of that behavior and attitude problem pool, and as they succeed in high school and succeed in college and end up with responsible, professional jobs with corporate America and the universities and government, I think that is going to send a signal to the minority community. It will indicate to those kids who have established this very destructive attitudinal and behavioral pattern that failing is not macho, they aren't "with it."

That is an additional advantage of your program.

Mr. HECKERT. No question.

You remind me of one other thing that I would like to add. I guess these discussions are largely focused on successful careers, the economic aspect of a person's life. We forget how important it is to overall satisfaction with one's life to really develop an understanding of this physical world in which we live, to understand how society functions, how economics work, how science operates around us.

There is so much in life that kids who don't ever learn those things miss. It is just a terrible shame, you know, and I regret the fact that they are not economically successful. I regret equally the fact that they don't get the enjoyment out of life that is there for the asking if they will just equip themselves with that knowledge.

Representative SCHEUER. A lot of these kids have what we call street smarts.

Mr. HECKERT. They are as bright as they can be.

Representative SCHEUER. They are bright as the dickens, and they can wheel and deal in the street, and they have the intellectual capacity to make it in academic pursuits. It is just that they turn themselves off.

And I am not saying for a moment that the schools don't bear a portion of the blame for turning these kids off. It is just that the combination of the kids' attitudinal and behavioral problems and the problems of the school—well, it is sort of a symbiotic relationship, and it is a question of each of them enhancing the destructive potential of the other.

The bad schools turn the kids off, and the kids' attitudinal behavioral problems turn the schools off. We have to do everything we can to repair both of them. If we can improve the schools and bring them the kind of programs that Mr. Dezell was talking about, I think that will improve attitudes and behavior. And if we can select out some of the kids who obviously have the intellectual capability of succeeding at a professional level, it seems to me inevitable that they would become role models and inspire the other kids to say, "Hey, succeeding isn't so bad after all."

Mr. HECKERT. That is certainly right.

Representative SCHEUER. Mr. Heckert, we did not succeed in getting you out of here by 11 o'clock, and that is my fault, but your testimony is informed and creative in its responses.

We thank you very much, and we will be in touch with you. We will put together some legislative programs under the leadership of Congressman Gus Hawkins.

Everything we do in this committee will be closely coordinated with the work of the Education and Labor Committee. They are the legislative committee of jurisdiction. Congressman Hawkins has been totally supportive of our hearings and we will be working under his leadership and with his staff.

But as we begin to put a program together, you can be sure that we will be in touch with you again.

Mr. HECKERT. Mr. Chairman, it has been a pleasure. Thank you very much.

Representative SCHEUER. Thank you very much.

Mr. HECKERT. And, Mr. Glasgow, I apologize. I will find out what you said later.

Representative SCHEUER. I am sorry for that.

We have plenty of time. We have another hour, if need be, assuming there are no bells, and so, Mr. Glasgow, why don't you chat with us informally for about 10 minutes, and then after we hear Mr. Tucker, we will have questions for all of you.

STATEMENT OF DOUGLAS G. GLASGOW, VICE PRESIDENT, WASHINGTON OPERATIONS, NATIONAL URBAN LEAGUE, INC.

Mr. GLASGOW. We are proud to have this opportunity to participate with you.

Representative SCHEUER. We are proud to have your involvement.

Mr. GLASGOW. I noticed you mentioned all of the people you would have liked to have had here, and I know your own deference prohibits you from saying that you would have liked to have had our President, John Jacob, here, and he is personally expressing his apology for not being able to be here, but had a previous meeting. You know that he is so interested in this whole issue of dropouts and dropout prevention in education.

As a matter of fact——

Representative SCHEUER. Could you pull the mike a little bit closer?

Mr. GLASGOW. Of course.

You know, just last year, in September 1986, he launched within the Urban League for the first time in about 15 years a program on education which involves every single one of the 112 affiliates of the Urban League to upgrade education in the schools from kindergarten to 12th grade.

It is a program which seeks, in many respects, to place all of the efforts of our League organization behind assisting schools to reduce the overall dropout rate and to help them develop preventive methods to retain students left within the educational system.

Today we have submitted testimony and placed it on the record in great detail. I would prefer to highlight a few issues pertaining to the problem of student dropouts.

Our first concern, Mr. Chairman, is the educational experience itself. We have found over the years in working with youngsters in the urban, inner-city communities that six specific characteristics of their educational experience have some impact on their dropping out.

One of them, of course, is overcrowded classes. Another one is insufficient individualized attention.

Another is abusiveness of the tracking and ability grouping system.

We have also found that teaching practices, and narrow curricula, become important factors in determining dropouts.

As I listened to the testimony this morning, I was very much impressed with the notion of vocational education. We know that in minority communities for a long period of time vocational education has been look upon adversely. It has been looked upon as a second track. It has been looked upon as the place you dump those who do not succeed in academics.

We know in our community that this issue has to be discussed. Increasingly today vocational education, particularly as it imparts technological skills to minority youth, increases their capacity to be competitive.

Later in my testimony I would like to address some of the vocational educational issues, particularly with respect to legislation. It is an extremely important field, for it has the potential of contributing immensely to minority youth education and their ability to gain the technological skills that allow them to be competitive in the marketplace.

Representative SCHEUER. What has that potential?

Mr. GLASGOW. To allow them to be competitive in the marketplace. I was suggesting that technology gains through vocational education programs will assist many of our minority youth to become much more competitive in the workplace.

A second issue of concern, of course, is the relationship of education to employment. That has been addressed here very effectively, but we are very concerned, particularly in the sense that we know that the highest percentage of those who are unemployed are minority and black youth.

Black youth's unemployment rate was 60.3 percent in contrast, the rate for white youth was 29.5 percent.

Unemployment has been contributed to in large measure by the numbers of young people, particularly in our minority communities, who have left the school system at such an early age that they lack the skills to be competitive today.

We also know that there is a problem that exists between the school itself and the workplace. There is an interesting trilogy which we begin to mention here, which is school, work, and an economy that can absorb. Particularly what we are concerned about is school, which has an educational system that has very little connection to the workplace.

An important factor in influencing a student dropping out is the student's view of the relationship between getting a high school education and achieving success in later life. If a student sees a strong relationship between obtaining a high school diploma and obtaining or getting a college education then the student will remain in school. However, this incentive is weakened by the reality of high unemployment rates, particularly among blacks.

We know that our educational system has been flawed, in that it has no direct connection between the educational system and the workplace itself. We must begin to create that and think about programs.

As I listened to the discussion of the program located in Germany—it just really struck me that one of the things that we did in our early work in the 1950's in the Street Academy Program was to work with young people and to work with them on the educational skills and their workplace skills. We gave them as part of the educational learning experience a connection to the workplace itself, so that the relationship between education and work became extremely important.

I know that you have been concerned about the attitudes and the behaviors of our high school dropouts and potential dropouts.

We have reviewed a number of local as well as national studies, and we know that there are some predictors that indicate which young people will be dropping out of school.

Representative SCHEUER. How early do you get that information?

Mr. GLASGOW. We can tell which young people will drop out as early as 7 or 8 years of age based on their educational experience.

Representative SCHEUER. Yes.

Mr. GLASGOW. For example, if you find a youngster who is approximately two or more grade levels behind, he or she is a potential dropout candidate.

It is a tragedy when you see someone in the second grade and there is contemplation of leaving that student behind. You know already that you have a problem because success in school is needed to motivate a student to stay in school.

We also know that another dropout predictor is if you come from a home where the father and mother have either been dropouts or have not been full participants in the educational experience.

We also know that there are some other social phenomena that occur in minority communities as well as nonminority communities, such as young people who become pregnant at a very early age. We know that parenthood at a very early age is detrimental to completion of school, for young women and for young men. Many of these young men become involved in the whole process of should they work and try to support and should they act like a man and get out of school, et cetera.

I would like to suggest that there are methods to prevent students from dropping out of school, some have been mentioned here—for example the use of new technologies. We have already observed the fact that technology, particularly among minority youngsters, is very effective.

I would like to state to my colleague here on the panel from IBM that they have been very, very supportive of our program, our national program of training people in becoming data processors and becoming PC literate.

But one of the things we have found——

Representative SCHEUER. PC literate?

Mr. GLASGOW. Personal computer, the small computer on the desk.

One of the things that we find is when you work with these youngsters—and as an educator, I know that if I were to sit and try to instruct them without the PC in front of them, with the exact same instruction, they would not absorb it. There would be all kinds of movement around the class, agitation and a desire to get out. You put the PC in front of them, you boot it up, turn it on, and you start them working, and they can use keys like, "return" and "enter." They can make it go back and forth, up and down. These youngsters have great dexterity and great capacity, and they get very involved in the PC technology.

Representative SCHEUER. They are challenged.

Mr. GLASGOW. Absolutely.

Representative SCHEUER. At how early of an age can you put one of those PC's in front of a child and have a great interaction?

Mr. GLASGOW. I cannot say absolutely, but they put children at 4 and 5 years of age on the PC's now.

Representative SCHEUER. The five signal from Mr. Dezell.

Mr. GLASGOW. At 4 and 5 years of age they put youngsters on these PC's. At 6 years of age they can use PC's just like we speak or, in our generation, how we thought and quantified.

Representative SCHEUER. Certainly four would present a preschool opportunity.

Mr. GLASGOW. Correct.

Representative SCHEUER. To put a PC in front of a child.

Mr. GLASGOW. Correct.

Representative SCHEUER. Do you think that should be reserved just for middle-class and rich children whose parents can afford to send them to a private prekindergarten or nursery school?

Mr. GLASGOW. Definitely not. I think increasingly we understand the need for technology to be used amongst those populations which are poor. You see, technology can be——

Representative SCHEUER. You think what we have been doing for a century is probably vastly misguided?

Mr. GLASGOW. For at least a few decades.

Representative SCHEUER. Reserving our enriched preschool experience for the kids of middle-class and wealthy parents?

Mr. GLASGOW. Yes.

You see, our middle-class kids arrive with the stimulation, the motivation, and the encouragement and the exposure, most of all, to be able to handle the educational system appropriately.

Representative SCHEUER. They come from homes that are educational factories.

Mr. GLASGOW. Absolutely.

The argument we made in 1960 and 1970 about the public schools in the urban cities was that they did not expose these youngsters or make up for the lack of exposure. With the technology available now, there exists the potential of educating and moving youngsters to become motivated and involved.

Let me suggest that there are some things that we ought to really consider when we talk about moving dropouts into the educational system, and I suggest that one of the things that we have to do is to look not only at technology but also look at some options, alternative school programs individualized instruction, special emphasis on early childhood programs—these are innovative programs that have been tested.

I spoke to you about our experience with the Street Academy back in the 1950's. We have also had some additional experience in working with youngsters who were dropouts. The National Urban League has worked with youngsters in various dropout retrieval programs.

The question you asked earlier concerning outreach is important. You must go into the homes of these families, talk with the parents, plus you must make them feel a part of the educational system. If they feel alien to the educational system, they will not come in and participate. Parents must understand that the educational system is a public system, available to them and should be used by them. Parents must be taught to negotiate the educational system.

It is important for a youngster to know that their parents are excited about their educational experience, and not afraid of participating in that educational experience, or intimidated by the school, or by the teacher.

Representative **Scheuer**. How do we create these results? How do we cope with parents who are comparatively unskilled and illiterate? How do we bring them to the point where they are not threatened, where they are excited by the possibilities that the schools offer for their kids and are supportive of their kids' learning success? How do we do that?

Mr. **Glasgow**. We have a great tool which we underutilize, and those are the community-based organizations. Community-based organizations have traditionally been those organizations such as our National Urban League organizations, but you have many others—OIC, for example—plus a number of other organizations that work very closely with community people. Community people rely upon community-based organizations and have positive feelings about their integrity and honesty.

Community-based organizations have access to black and other minority families and we can successfully work with them.

You can do it by an outreach program. You go out, you ring door bells, you talk to these families, you sit with them, you accompany them to the schools to meet with teachers and/or principals.

From this experience, you really begin to understand how insensitive some of our teachers are when they interact with poor people.

Representative **Scheuer**. Does that include black teachers as well as white teachers?

Mr. **Glasgow**. It happens with black and white teachers. Some persons with an education feel a certain amount of superiority over those who have less education. It is important that feelings of dignity and worth be imparted to students and parents.

Some persons who have education—and in particular, educators, are so insulated in that educational system—they deprecate other persons who have less education.

I as an educator myself, with my child, have gone into school, and I have heard teachers who don't understand that I am also a teacher, an educator, say to me, "You know, one of the things I think you are doing, Mr. Glasgow, is you are pushing Karen too hard."

The teacher stood there and was instructing me on how to downgrade the aspirations and motivation of my child. Well, we had an excellent exchange—at least I thought it was. I am proud that I did get involved. At this point, my daughter is an educator herself, and she is really committed to teaching severely retarded children, and a linguist in her own right. So, I feel proud that somehow I did not take that advice.

But many young or many families, poor people——

Representative SCHEUER. Would.

Mr. GLASGOW. Would. Absolutely. Here is the great educator. They sit there, they cajole them, et cetera. They defeat the parent's aspirations for the child and downgrade the ability of the child. Community-based organizations are needed to assist parents in negotiating the educational system.

I would like to conclude——

Representative SCHEUER. What kinds of organizations are you speaking of?

Mr. GLASGOW. When I say community-based organizations?

Representative SCHEUER. Church?

Mr. GLASGOW. Church and the Greek letters, like Delta, the LINKS, which is another community-based organization. You have Urban Leagues, you have OIC's that exist. There are many within the community. Unfortunately, there has been a decline in the number of institutions within the minority communities that served the community over the years. A lot of it has to do with the lack of finances to sustain them.

But I can remember the time when you moved into a minority community—a minority person, particularly a black person, went to one of the local institutions of the people, for example, an Urban League for assistance. That's what is so important about the Urban League, because a person could say, "I need to get a job. Or what do I do to do so-and-so?" You were informed by community-based organizations of methods necessary to secure housing and what schools your child could attend. They taught you how to fill out applications and tests, et cetera.

This was done for blacks who, I would say, in the 1920's and 1930's were even less prepared than blacks are now when they moved into some of our urban cities.

The problem today is that there is too heavy of a reliance upon some of the major, larger public organizations without them being attached to some of the community-based organizations. I think that linkage has to be there in order to sort of vitalize and make more relevant the educational institutions.

I just would like to conclude, Mr. Chairman, by noting that many of the experiences which I am sure you have heard before, and which we heard to day, plus our experience in working with some of these programs represent greater interventions by the private and voluntary sector.

We encourage you to continue your efforts of extending the congressional and the Federal presence in education. It is absolutely necessary and needed. While we, too, would not argue for Federal control of education, we surely encourage the Federal resources to stimulate and to undergird creative programs that have the potential of helping minorities.

I would like to conclude just by sharing with you a little vignette which I shared with Marc Tucker here. Somewhere along the line, when I used to do research, I did some research with dropouts in the Los Angeles area of Watts post-1965 riots, 1968. And as a young doctorate candidate at that time, I was asking those erudite questions that young doctorates ask such as, "Why did you drop out," et cetera, and this youngster kept giving me these very typical monosyllabic kinds of responses, "Because it was no good. Goes nowhere. It's a drag. Nothing's happening."

And after I finished my interview, he said to me, "You know, I'm going to tell you something, Doc." He said, "You know, there is no other institution in this country, no other business in this country that could so repeatedly or so often put out failures and stay in business." He said, "Any other institution, any business in this country that put out so many bad products, they would run them out of business. It occurs only in education."

Representative SCHEUER. This is a comparatively illiterate, unskilled——

Mr. GLASGOW. Absolutely. With such a profound observation.

Representative SCHEUER. How did he get to be so wise?

Mr. GLASGOW. As you say, he knows the streets. His mind is good. The opportunity was lacking.

Thank you, Mr. Chairman.

Representative SCHEUER. Thank you very, very much, Mr. Glasgow. You get the message back to John Jacobs that we are sorry that he couldn't come this morning, but that he had excellent, first-class talent filling his shoes down here.

[The prepared statement of Mr. Glasgow follows:]

PREPARED STATEMENT OF DOUGLAS G. GLASGOW

Mr. Chairman and members of this Committee, I am pleased to present testimony on an issue of concern to the nation and to the National Urban League (NUL) namely, the association between the ineffective educational experience of Black, poor and other minority high school dropouts and their resultant attitudes and behaviors. There is a need for change within the educational experiences of Black, poor and other minority students in order to prevent potential dropouts from leaving school and to encourage dropouts to reenter school and graduate. Education continues to be one of the top priorities of the National Urban League. Indeed, education is viewed by the larger Black community as one of the most salient methods of obtaining a better quality of life for our children. The high rate of Black high school dropouts presents a threat to this goal. The drop out rate of our youth also impedes their entry into the world of work.

The National Urban League was founded in 1910 as a nonprofit community service organization committed to securing full and equal opportunity for minorities and the poor. Through its affiliate network, the Urban League is represented in 34 states and 111 cities (including the District of Columbia). Over one million persons are served every year by the Urban League Movement through its comprehensive array of projects, programs, and initiatives that address such needs as education, employment training, adolescent pregnancy, health, housing and community crime prevention.

HISTORICAL BACKGROUND

During its more than 77 years of service the National Urban League has been aware of the pivotal role of education in the economic and social progress of Black Americans. In the 1950s, the NUL encouraged young Black students to pursue mathematics and science courses so that they could be trained for scientific and technical fields. This was done under the umbrella of the NUL Tommorow's Scientists and Technicians Program.

In the 1960s and 1970s, the NUL Street Academy programs were developed to address the dropout problem. They held the perspective that all students were educable (NUL Research Department, 1977). The Street Academy's code was that Black, poor and minority students were retrievable whether they were underachievers, dropouts or pushouts. The main goal was to establish effective educational programs that would enable them to acquire coping skills, and the necessary knowledge and competence to live successfully as productive citizens.

The ineffectiveness of the school system for minorities and the poor, as well as the high dropout rates of these students led to a wave of remedial "storefront programs" in the 1960s which used nonpublic funds (NUL Research Department, 1977). A program structure and personnel "in tune" with the students reintroduced them to the educational process. Tutorial sessions and individualized methods were used to influence student feelings about themselves, their learning, as well as those things in their immediate environment which help or hurt personal and educational growth.

The National Urban League received funding for a Street Academy five year demonstration project for the period 1972-1977. Three levels characterized the Street Academy Program. The first level of the Street Academy program sought by informal device, e.g. group rap sessions, to reintroduce students to the educational process. The second level, the Academy of Transition developed students for entry into more formal learning situations. The third level, the Prep School assisted students in preparing for entry into the job market and for admission to college (NUL Research Department, 1977).

Other educational areas such as quality desegregation plans, vocational education and multicultural curriculum were also focused upon in the 1970s by the League. Currently, the main educational focus of the League is our Education Initiative which was launched officially in September 1986. There is a need for the National Urban League's Education Initiative because despite the widespread concern about schools and the implementation of various educational reforms, the needs of too many Black children are largely ignored. As part of the Education Initiative, each of the Affiliates design programs to improve the educational achievement among Black public school students by mobilizing parents and community persons to become involved in the educational process. Dropout programs are included as part of the Education Initiative.

THE EDUCATIONAL EXPERIENCE

In order to develop effective methods for reducing the overall dropout rate and to develop preventive methods to retain those students left within the educational system, a sound understanding is required of the factors that influence a student's decision to drop out of school. One such factor that influences a student to drop out of school is the type of experience that the student has within the school system. From 1983-1984, a Board of Inquiry appointed by the National Coalition of Advocates for Students (NCAS) studied the public school system paying particular attention to students who have not been adequately served by it. In its 1985 report (Barriers to Excellence: Our Children at Risk), the Board states that:

> The rising number of school dropouts is the single most dramatic indicator of the degree to which schools are failing children (p.X1)

Some of the specific characteristics of public schools which the report cited as barriers to student development and potential contributors to school dropout include: overcrowded classes and insufficient individualized attention for students; abuse of tracking and ability grouping; misuse of testing; narrow curricula and teaching practices which discourage active participation in learning on the part of students; vocational education programs which fail to reinforce regular academic courses or problem solving, reasoning or analytic skills; a lack of support services such as counseling for students and a lack of support for parent involvement in decision making.

In addition to these barriers faced by all students, the NCAS report cited an additional barrier for minority and economically disadvantaged children; that is, continued discriminatory practices. According to the report (NCAS, 1985):

> We found over and over again in our inquiry that subtle forms of discrimination still exist in schools. We learned about the daily practices and institutional mechanisms that undermine students' self-esteem and work to push students out of school altogether (p.1).

One of the most destructive aspects of school faced by poor and minority students is low expectation by teachers. The report (NCAS, 1985) observed further that:

> Research has documented the special potency of class background, as well as race, in determining teachers' perceptions of and behaviors toward children. According to these studies, teachers often adjust educational goals, teach different material, and reward or punish behavior differently by class as well as race (p.7)

In 1980, I wrote and published a book entitled, The Black Underclass: Poverty, Unemployment and Entrapment of Ghetto Youth (Glasgow, 1980). While conducting the research for that book, I discovered that for dropouts aged 14 to 17, educational institutions and their agents, administrators and teachers were experienced as antagonistic elements in their socialization, rather than as facilitators of their goals. Moreover, the high schools from which these students dropped out, rarely helped them to transform their early aspirations by making them aware of the range of vocations available. Further, the schools failed to identify particular courses required for a specific career goal (Glasgow, 1980).

The National Urban League's Black Pulse Survey reported strong evidence that expulsions and suspension of Black students is a very serious problem for Black families (McGhee, 1984). In that survey, 30% of low income Black households and 18% of middle income households with children indicated that a child had been suspended or expelled from school in the previous year. The rate of suspension or expulsion from school reflects, what are perceived by school administrators to be discipline problems.

Black students are three times more likely to be suspended from school than white students. Thus, the inability to attend classes makes it difficult for Black students to keep up with course work, thereby increasing their potential for dropout. The High School and Beyond study stated that males left school early because of discipline problems at more than twice the rate that females did (cited in McGhee, 1984). Many reports have emerged over the years in both the news media and the research literature citing the nature and extent of the conflict that takes place between Black males and teachers and principals. As a result of these studies and reports, there is much controversy as to whether Blacks, especially males who leave school without graduating, drop out voluntarily or in fact are pushed out by a hostile educational system.

Black students are also three times more likely to be misclassified and placed in special education classes. Consequently, thirty years after Brown vs. Board of Education of Topeka (1954) many Black students are being resegregated within the schools and effectively excluded from the regular classroom.

In May 1984, the National Urban League issued a paper commemorating the anniversary of the Brown decision (NUL Education Cluster, 1984). Addressing many of the existing problems in school systems the paper (NUL Education Cluster, 1984) states:

> The National Urban League offers an expanded definition of "equity" which includes the concept of parity of educational results. Equity in the 1980s is redefined and holds that in addition to access, the educational system must provide a learning environment in which Black and poor students are able to demonstrate results which are commensurate with those of white students. Equity of educational programs can be measured by outcomes, such as reduction of dropout and pushout rates, improved retention rates of minorities in the four-year higher education programs, proportionate representation in programs for the gifted, reduction in the disproportionate representation of minority males in disciplinary actions, (such as suspensions and expulsions) and standardized test scores which more nearly approximate those of similar white populations (.4).

In addition to these characteristics of the school system, a student's view of how important a high school education is to his future achievements also plays an important role in his decision to dropout.

THE RELATIONSHIP OF EDUCATION TO EMPLOYMENT, MEAN INCOME AND POVERTY FOR BLACKS

Another factor influencing a student's dropping out is the student's view of the relationship between getting a high school education and achieving success in later life. If a student sees a strong relationship between obtaining a high school diploma and obtaining a job or getting a college education, then the student will have a greater incentive to remain in school. However, this incentive is weakened by the reality of high unemployment rates, particularly among Blacks.

According to Dr. Bernard C. Watson (1987), Black children are more than twice as likely as white children to have no parent employed, and almost 4 times as likely to have no parents in the labor force. The 1985-86 Digest of Education Statistics reported that the unemployment rate for Black high school graduates was 49.8%, while the rate for their white counterparts was 17.7%. Moreover, the unemployment rate for white high school dropouts (aged 16-24) was 25.7%. A Black high school graduate's unemployment rate is therefore almost 100% higher than a white high school dropout's unemployment rate.

In the first quarter of 1987, the NUL's hidden unemployment rate for Black teenagers (aged 16-19) was an astounding 60.3% while the rate for white teenagers (aged 16-19) was 29.5% (NUL Research Department, 1987). These inequities in the labor market undermine the commitment of Black students to obtain a high school education.

Census data reveals also that the labor market sends negative signals to Black Americans about the importance of education in getting and obtaining a job relative to their white counterparts.

The National Urban League Research department's (1987) Quarterly Economic Report on the Black Worker states further that these signals have worsened over recent years. In 1970, for example, Blacks with four years or more of college were employed at a slightly lower rate than their white counterparts (1.4% and 1.5% respectively). In 1986, unemployment rates had risen for both groups. However, Black unemployment rates were 1.5 times that of whites with four years or more of college.

When the list of labor market variables is expanded to include mean income, the trend of a rising Black-white gap with higher levels of education is still observable(NUL Research Department, 1987). In 1984, Black households headed by a person with 4 years or more of college received only 73% as much income as their white counterparts. On the other hand, white households headed by a person with eight years of elementary school received 92% as much income as a Black high school graduate.

The Quarterly Economic Report states further that these data paralled data on poverty rates and education. Black Americans with one or more years of college exist in poverty at a rate virtually equal to whites with eight years of elementary education. Blacks with one year or more of college exist in poverty 4.4 times the rate of their white counterparts. Blacks with less than eight years of elementary school exist in poverty at only 1.37 times the rate of their white counterparts. Furthermore, 16.9% of Black families with working heads existed in poverty, relative to 6.4% of white families.

In summary, in contemporary American society, education is embodied with certain race-based ironies (NUL Research Department, 1987). For Blacks, as is true for whites, investment in education does provide returns in that those with more education negotiate the labor market more successfully than those with less education.

However, additional educational attainment correlates with a widened gap between the labor market successes of Blacks and Whites. In other words, the American labor market sends weak signals to Black Americans about the value of higher education. These inequities in the labor market undermine the commitment of Black students to remain in high school through graduation.

ATTITUDE AND BEHAVIOR OF HIGH SCHOOL DROPOUTS AND "POTENTIAL" DROPOUTS

Poverty and the associated poor quality of education experienced within public schools in low income neighborhoods are major factors that cause many poor and minority youth to drop out of school (Childrens Defense 1987). Dropouts often have negative attitudes toward school largely due to the schools negative attitude toward them (High school Dropout Prevention Network 1985). In some inner city schools, about half of the students drop out. (General Accounting Office, 1987).

Dropouts are more often identifiable by the following characteristics:

(1) A higher percentage of dropouts are found among American Indians, Blacks and Hispanics;

(2) A greater percentage of dropouts demonstrate a tendency to have been behind academically for several years;

(3) Dropouts tend to have a high rate of absenteeism and truancy;

(4) Dropouts tend to have low reading and overall achievement levels;

(5) Students who drop out have often failed one grade or more;

(6) Dropouts tend to exhibit discipline problems in school more often than students who remain in school;

(7) Language problems are often a vital factor contributing to the dropout rate. Language barriers often cause Hispanic and other students with limited English proficiency problems that undermine their academic performance.

(8) Dropouts tend to be more mobile than other students. In other words, they often change residence more, causing them to attend more schools which negatively affects their academic performance;

(9) Dropouts most often are from poor or impoverished families (High School Dropout Prevention Network, 1985).

Numerous national and local studies have reported some predictors that indicate which young people will drop out of school. Among the predictors are: Being 2 or more years behind grade level; coming from a home where the father or mother dropped out, and being pregnant (General Accounting Office, 1987). Pregnancy or early parenthood is a major reason for young women dropping out of school. The problem affects young fathers also. Many young fathers quit school to help support their families (Children's Defense Fund, 1987).

Other studies have pointed out that high school dropouts are often withdrawn, disruptive, emotionally insecure about their ability to achieve, and exhibit low self esteem (High School Dropout Prevention Network, 1985). The lack of academic success in the school leads to a loss in motivation to stay in school.

Young black men are about 70 percent more likely to drop out of school for financial reasons than young white men, which is a reflection of the greater poverty rates suffered by minorities (Childrens Defense Fund 1987).

Research has provided us with much information about the attitudes and behaviors of the high school dropout or the potential dropout. Therefore, it is necessary to use this information to target "at risk students" and to respond to the attitudes and behaviors of the potential dropout with targeted programming.

METHODS TO PREVENT STUDENTS FROM DROPPING OUT OF SCHOOL

Educability refers to education in the widest sense. Students can be taught values and appropriate modes of behavior. They can acquire skills and perform adequately in reading, mathematics and writing. Services and supportive environments must be provided that facilitate their development. A student's rejection of "schooling" based on previous experience should not be assumed to be a rejection of education in a wider sense. We must be aware that a specific program may simply not be able to "reach" every student. Students can be assisted in acquiring those coping abilities and knowledge required to live successfully as productive citizens in society.

Coping abilities and knowledge required for productive citizenship are important educational outcomes. This concept refers to the broadening of student abilities to strive successfully and on equal terms for psychological growth, economic achievement, social satisfaction and political awareness. The goal is the transmission of knowledge for personal growth and the achievement of individual objectives, but in a manner also oriented to the achievement of minority group goals. Knowledge of one's self, the environment, society, and the world are primary objectives of learning.

Existing and emerging educational delivery systems need to be examined to develop increased alternative approaches to education which are more responsive to the needs of the large number of potential dropouts. A summary of these alternative approaches will be discussed briefly in the section which follows.

Alternative Education Approaches For Dropout Prevention

Programs seen as most effective for poor, urban, and minority youth aged 16 or younger who are at risk of dropping out have the following objectives: improving academic performance, fostering attitudinal change, reducing absenteeism, job training/placement, prenatal care/parenting support services and child care services (General Accounting Office, 1987). Services needed include basic education, personal and career counseling assistance in obtaining social services, parental involvement, job skills training, job search assistance, part-time employment placement and pregnancy/ parental counseling (General Accounting Office, 1987).

Factors which influence the effectiveness of a dropout prevention program are: a caring and committed staff, a nonthreatening environment for learning, a low student-teacher ratio, individualized instructions, flexible programs, links with social service agencies involvement of parents in students' development, and links with employers.

There is a need to intervene with at-risk students in the preteenage years before they reach high school. Also advocated are the following dropout prevention strategies:

- A positive school climate that combines strong, committed leaders; autonomy to make decisions; a stable staff, receiving support and sufficient ongoing training; good student-teacher relationships; orderly classrooms;
- High expectations for students;
- Strong teachers who are prepared for the challenge of the classroom;
- Collaboration with business groups social services, community groups and the schools to assist potential dropouts (Education Week, 1987).

The Role of Business

Businesses working with schools need to target specifically on the needs of potential dropouts. Businesses should explore ways to provide part-time jobs to high school youth as a way to keep them in school (High School Dropout Prevention Network, 1985). Some businesses have agreed to work cooperatively with the schools and to offer jobs to in-school youths and to graduates.

The Role of the Community

Representatives of the community should be involved in the dropout prevention task force of each school district. They should assist in reviewing and developing a coordinated service delivery system targeting on potential dropouts.

Community service organizations should focus on strengthening positive family values, parenting skills, and values regarding the worth of the individual as a means of striking at some of the root causes of the dropout problem (High School Dropout Prevention Network, 1985). It is also important for children to be surrounded by or to have Black role models or mentors who have succeeded both educationally and economically so that the connection between education and future economic success is made concrete.

Community service organizations should increase family and student support systems in cooperation with school systems. Moreover, these organizations should adopt-a-school. Much can be done by community organizations to assist potential dropouts.

National Urban League Programs

Dropout problems are not insurmountable and the National Urban League has a long and successful history of working with students who are at risk of dropping out of schools. For example, the Detroit Urban League's "In-School Street School" worked with eighth grade students in Barbour Middle School who are "at risk" students. Two Urban League counselors worked with the class and visited their homes once a month. Each student had a Big Brother or Big Sister. The results of this caring approach has been an increase in reading and mathematics scores.

Urban Leagues in Pittsburgh, Pennsylvania, Portland, Oregon and Houston, Texas have initiated programs for "at risk" students that are intended to provide the skills needed to make a successful transition from school to work, a post-secondary institution or a combination of the two.

Through this program, academies for "at risk" students were established within existing high schools. The academies consist of classes structured for students who have the potential to do well in school, but who show signs of dropping out. These students are identified and brought together to be taught as a group within the school. The Curriculum is designed to provide students with strong academic skills, as well as relevant career education and work experience in growth industries.

This school within a school approach brings together the strengths of the Urban League, the school system and the business community for the benefit of the students. Through the academies the students are provided with:

- Instruction in academic courses needed to successfully complete high school and go on to college, if desired;
- Training in a field of employment that promises to be a growth industry;
- Field trips to designated businesses in the community:
- Mentors from the business community who establish and maintain a one-on-one relationship with students, act as a resource and provide guidance;
- Instructors and guest speakers from the business community for career education-related courses; and
- Summer work experience in businesses involved with the academies.

Each of the three Urban League affiliates established an academy in one of their city's public schools. In Houston, the Microprocessor Training Academy was developed. Pittsburg established the Business and Finance Academy, and Portland established the Financial Services Technology Academy.

Through this program the Urban League affiliates are directly addressing many of the problems faced by students within their schools. In addition, the Urban League is strengthening the linkage between a high school education, post secondary education and employment. The curriculum and teacher practices have been made relevant to current career opportunities. Students are taught using a variety of instructional methods which allow them to become actively involved in the learning process. Through mentors, field trips and summer employment, students establish ties with the work world before leaving high school.

In addition to the advice provided by school counselors and mentors, students can seek assistance from Urban League educational counselors who spend one day a week at the schools as part of the academy program. Parental involvement in the program is encouraged by the Urban League through efforts such as the development of Parents' groups. And finally, support services provided by the Urban League, such as employment, housing and higher education counseling are made available to the entire family.

Other dropout programs are underway in the National Urban League. Further details can be obtained from the Education Director in our New York office.

Through its affiliates, the National Urban League also has Adolescent Pregnancy/Prevention Projects. Note the following:

- o 26 affiliates have primary prevention projects;
- o 16 affiliates have secondary prevention projects;
- o 37 affiliates have male responsibility programs, projects or activities.

The adolescent pregnancy programs initiative is placed on a continuum for targeting various levels of services as follows: prevention of sexual activity; services to sexually active teens; services to pregnant teens; services to parenting teens; and prevention of second pregnancy. Selected interim evaluation preliminary findings indicate that teens can do the following:

- o prevent early childbearing;
- o be helped to complete their education;
- o make responsible decisions on sexual activity and contraception.

The Role of Federal Government

The National Urban League advocates for strong federal role in education. The federal government has the primary responsibility to identify the national interest in education and should, therefore, help fund and support efforts to protect and promote that interest. A commitment must be made to reorder budgeting priorities to secure additional resources to effectively address the dropout problem. Money invested in solving the dropout problem will ultimately lower the costs of welfare, unemployment, crime and mental health problems.

The federal government should make available sufficient funds targeted to student populations evidencing specific educational needs. For example Chapter One which is part of the Omnibus Education Bill (H.R.5) provides basic instructional services, such as remedial reading and mathematics for disadvantaged elementary and secondary students. It has improved significantly the test score of participants. However, Chapter One services have been denied to about 50% of the children in need this service. This successful and cost effective program must be made available to all eligible children. The current Omnibus Education Bill(H.R.5) should be passed with sufficient funding so that all eligible children are served. For the record, I have already entered testimony on this Bill on 3/16/87. In addition to other important services, H.R. 5, which is yet to be voted on, provides for comprehensive dropout prevention, identification, outreach and dropout reentry programs.

Special emphasis should also be placed on the adequate funding of early childhood education programs which research indicates enables these children to make greater gains in education and employment than those who did not attend preschool. The Omnibus Education Bill H.R.5 which includes Chapter One creates a new "Even Start" program which expands Chapter One services and authorizes funds to early childhood education programs (Major Provisions of House Panel's Education Bill, May 1987).

In addition, alternative education programs need to receive much more attention by Congress and more funds to assist in dropout prevention. Further current programs, such as JTPA whose funds are channeled through the state to local governments, should be used to leverage an increased graduation rate. A strong incentive to keep potential dropouts in school is part-time work. Funds should therefore be made available to local school districts for the development of programs for skills training for potential dropouts, thereby tying jobs to the students staying in school. Although a certain percentage of JTPA funding nationally, has been set aside for youth and dropouts, much of this designated money has not been spent on these groups.

Although no specific funds are targeted within the Carl Perkins Vocational Act for Dropouts, a state can use its vocational education funds to provide dropout programs. This information should be publicized. Moreover, under Title 3A of the Carl Perkins Vocational Act, funds are set aside for community based organizations and local education agencies to work together to assist economically and educationally disadvantaged youth (aged 16-21) to obtain skills necessary to enter vocational training. This money has been used as funding for reentry efforts for dropouts.

Conclusion

The National Urban League looks forward to working with Congress in a bi-partisan effort to provide legislation to prevent high school dropouts. This nation, at the federal, state, local private and community levels, possesses the knowledge and the resources to prevent high school student dropouts. The National Urban League calls for national leadership at all levels to rectify this situation.

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Representative SCHEUER. All right. Marc Tucker, executive director of the Carnegie Forum on Education and the Economy.

It is probably appropriate, Marc, that you are the last witness on the last day. You were in at the creation, and now you are participating in the summit. I want to take this second opportunity to thank you for your marvelous contributions to these hearings from the very beginning to the very end. We are very much in your debt.

So, please give us your thoughts in 10 or 12 minutes, and then we will have some questions for the whole panel.

STATEMENT OF MARC S. TUCKER, EXECUTIVE DIRECTOR, CARNEGIE FORUM ON EDUCATION AND THE ECONOMY

Mr. TUCKER. It has been an enormous honor to participate with you in this very interesting and, I think, ultimately influential endeavor. Doug Glasgow and the young man from Los Angeles could not have done a better job of introducing what it is I have to say.

I want to bring this back, if I can, to what I take to be the central issue for this body, which is, namely, what the Federal role ought to be with respect to all of these issues.

For me at least, one of the—perhaps the—central problem that we face was summed up by you in one of your questions to Mr. Heckert a few moments ago. We are in direct competition with labor forces at least as well educated as we, who are prepared to work at least twice as many hours a year as are we for perhaps one-tenth the wages. That is the problem that we face: We either lower our wage rates until they equal theirs, or we improve the skills of our workers until we can justify wage rates that are 10 times as high. It comes down to that.

If we choose the latter, then we face an awesome task because somehow we have to take all these enormous numbers and varieties of institutions in the United States that educate, train, and retrain people, and vastly improve the quality of their work with the people that they serve.

What we somehow have to do is produce an enormous improvement in the quality of their output with only a modest increase in the cost, which is simply a way of saying that we somehow have to find a way to vastly improve the productivity of American institutions that educate, train, and retrain people in this country. We have to find a way to do that. It is desperately important.

Now, what is really interesting to look at is the last 5, 10, 15 years in the private sector in the United States. In the private sector, one firm and one industry after another has gone through convulsions, restructuring themselves, often with enormous pain.

Not all firms, not all industries. But those that are making it have gone through convulsions in order to figure out how to compete in a deadly competitive environment. They have been restructuring themselves. They have done this to improve their own productivity because the price for not doing that, for not restructuring to greatly improve their productivity, is to go out of business. That is the penalty for failure.

On the other side, the problem we face is that ultimately their success is almost totally dependent on the skills of the labor force, on public institutions that are not in the competitive marketplace, that are not going to go out of business if they fail. That is the insight of that young man in Los Angeles.

Representative SCHEUER. They are not accountable.

Mr. TUCKER. They are not accountable. Precisely.

The real problem this society faces is how we can improve productivity in the public sector to the same degree that the private sector is desperately trying to improve their own.

That for me frames the question with regard to the Federal role in education. We have defined it at least since the Kennedy administration as providing access, implicitly, to a system that works. The problem has been providing access to it, not changing the system. What we now face is a system that does not work.

That means, to me, we have to figure out how to redefine the Federal role. The Federal Government has to take its place alongside the States in figuring out how to restructure our system of education, training, and retraining in this country so that we deliver, produce, provide incentives to the key people who work in those public sector institutions to greatly improve their productivity for everybody, but not least for the most disadvantaged of the people that they serve. That is the problem.

Now, what that comes down to, in a nutshell—back to the young man in Los Angeles—is finding a way to arrange the world so that the people in those institutions face real rewards for success with their clients and face real penalties for failure. Until we get that, we will not get improvement.

Mr. Dezell described a program that his organization produces which has an unblemished record of extraordinary success in the schools, without a doubt. It is not the only program of that kind but it is——

Representative SCHEUER. Which program?

Mr. TUCKER. I am referring to the Writing to Read Program of IMB. One of the most remarked things throughout these hearings has been the success of the Head Start Program, with which you had a lot to do at its inception. And the theme of the questions about Head Start is how come the schools, the districts, the States, haven't put their own money behind it? The question I would ask about Writing to Read is: If it has such a record of extraordinary success, why isn't that program being used in every single school and district in the United States?

I could ask the same question about one proven successful program after another, and the answer to all of those questions is very simple: It really is. It is very simple. There are no real rewards for success and no real penalties for failure. So if the incremental cost of Head Start or the incremental cost for Writing to Read happens to be, as it is, significant, then the answer is that we cannot afford it. There is no downside risk. People don't get fired if kids don't learn. That is why. That is the answer.

Now, if that is the case and if it is so desperately important for us to vastly improve kids' performance, what the Federal role in education ought to be, in my view, is to figure out ways to use its leverage so it can start producing a system through the States and localities where there are real rewards for success, real penalties for failure.

Because time is short, I want to give you just one example of how that might work. It happens to be a real example. It was the design principle behind what became President Carter's Youth Act proposal in the closing months of his administration. It is a legislative proposal that did not pass but came closer to passing than any of us thought likely at the time.

The problem that those of us involved in designing this piece of legislation were trying to address was how to improve the outcomes for youth in our country with respect to education and employment at the secondary level. How do you do that?

What we suggested was that you add to the money that is out there on the table now for compensatory programs for youth and you make it available for school districts on the same basis that it is made available now. That is the count of kids who come from low-income families. Only you do something different with it than you now do. What you do is you say to the school district, what we want you to do is to solicit proposals from the schools in your district that contain eligible kids, as defined by the program. These will be proposals that describe what your goals are for these kids and how you propose to reach them.

We want you to involve the parents. We want you to involve the kids, if that is appropriate. We want you to involve the teachers—whoever you have to involve to put together a good proposal. When you have got your proposal done, don't send it to the central school district, send it to the local PIC, the private industry council, augment it by people who come from exactly the kinds of institutions that Doug Glasgow has just described, community-based organizations.

Let them evaluate these proposals. Let them make an estimate of whether these are the right objectives for the kids, the business people, the employers, and the community-based organizations, and let them make an estimate of the possibility that what you propose for these kids is actually going to work.

Okay. You rate and you rank these proposals—the PIC does—in a very public way, "This one is first, and here is why we think so," and you send that list to the school administration, the superintendent.

Now, they can pick whichever proposals they like as winners. But they will be under some public obligation to explain why they choose proposals that are different from those that are rated and ranked by the PIC at the top.

Over the course of the next 2 or 3 years, if our proposal had succeeded, the school district would be obligated to provide assistance to those schools where not much progress was being made. If that assistance didn't seem to work, they would be obligated to take the money away from the schools that were not making very much progress for the kids and give it to other schools with eligible kids who produced proposals that looked promising.

You keep turning the money over. The district would be obligated to turn the money over so that the money went to schools that were making progress for the kids. There would not be competition among school districts, but there would be intense competition among schools within a district to get this money. In other words, simply having eligible kids wouldn't be enough to get the money;

you would have to have eligible kids, you would have to have a good plan, and after you got the money, you would have to make real progress against that plan. Otherwise, no money; the money goes to somebody else with eligible kids.

Representative SCHEUER. You have to provide incentives and disincentives for the schools to cooperate in every which way that they possibly can.

Mr. TUCKER. Yes.

Representative SCHEUER. To make the plan work.

Mr. TUCKER. The only way it can work if is they have relationships with the community and with the parents that would enable them to make that kind of progress with the kids. And I can tell you they would go out right away if they found that that IBM program worked with those kids. They would be beating their doors down to get it or anything else that would make a difference because the penalty if they didn't use the things that worked would be they would lose the money. They wouldn't have the money. It would go away. Not only that——

Representative SCHEUER. How about incentives and disincentives for particular teachers' success or failure and for a particular principal's sucess or failure?

Mr. TUCKER. Absolutely.

Representative SCHEUER. The teachers in this country urgently want to be paid more, and I think they should be paid more.

Mr. TUCKER. Yes.

Representative SCHEUER. We do not reward our teachers. One of the reasons we are not getting the top kids in college to go into teaching is because the rewards for teaching are less than the rewards for other pursuits.

Mr. TUCKER. Correct.

Representative SCHEUER. Women used to go into teaching in large numbers because all they could do other then teaching was to be hospital nurses. That was all that was open to them. But now women go into law, they go into medicine, they go to the Harvard Business School, and they have all kinds of possibilities in society.

On the front page of the Wall Street Journal or the New York Times just in the last day or two was an article of how women are emerging on corporate boards in greater numbers than ever before. This means that with all of these opportunities available for outstanding young people, especially women, that if the profession of teaching cannot offer both financial rewards and psychic rewards, we are going to get the dregs of the college crop.

Mr. TUCKER. That is absolutely right.

Representative SCHEUER. I think we ought to pay teachers more. I think we ought to enhance the prestige, the emoluments, the working conditions of teachers substantially so that we do get some of the best. We are getting some of the best now but not enough. However, I think as a tradeoff, if teachers want that prestige, those emoluments, the pay scale—and I think they should have all of those things—they also should accept some measurement of success or failure in their own promotion and advancement and, indeed, in tenure, too.

So, we have to have success or failure measurements as far as the school is concerned. We have to have measurements of success or failure that impacts the school and also impacts the individual teacher and the individual principal, it seems to me.

Mr. TUCKER. I wholly agree. I think that is absolutely right. We needed to have a system out there, first of all, where there are real career opportunities for teachers so that as they gain skill and experience and proven competence, they gain more responsibility in the system and with it, more pay. That is what a real career means.

But I think at bottom you are absolutely right. We have to find a way of relating real success with kids to more pay for teachers. That is absolutely essential. There has got to be some relationship between the progress the kids make and what comes back to the teacher and the principal, as it is for everybody else.

What is very clear, I think, is that the kinds of people we most want to get in teaching and keep in teaching are people for whom such a system would be very welcome. That is to say, the good teachers out there want to be recognized as good teachers. They want to be on the line. They want to be in a situation where if they really are successful with kids, the world knows it.

Representative SCHEUER. They welcome their success or failure being measured, to be confident that they are producing successful outcomes.

Mr. TUCKER. Absolutely. There are lots of ways to do that, and I believe that it is possible for Federal policy to encourage those developments, to push them along and to reward States and localities that put systems in place that capture these ideas. It is terribly important for Federal policy to start doing that.

The Federal Government, I think, can no longer be indifferent to whether the needs of these kids are actually being met.

Representative SCHEUER. Well, thank you, Marc. We expected excellence and creativity from you, and we got it.

[The prepared statement of Mr. Tucker follows:]

PREPARED STATEMENT OF MARC S. TUCKER

This is the last of a landmark series of hearings on the quality of the American workforce. The testimony has covered a vast territory and been extraordinarily rich. It is possible to get lost in that landscape. What I want to do this morning is pick up a theme that has been woven, often implicitly, through much of the testimony and highlight it.

The underlying topic here is the federal role in education, training and retraining. The question is what that role should be in the future, in particular, whether and how that role should be different from what it has been in the past.

The modern federal role in education was defined in the Kennedy and Johnson administrations, and strongly reaffirmed in the Nixon years. Its hallmark and foundation is a commitment to provide access to education for those for whom access had effectively been denied or severely curtailed: for low-income children, minorities, the handicapped and women, and, in higher education, for those who had been prevented from attending college by lack of financial resources.

Other subthemes in the federal role included efforts to improve the delivery of educational services through research, financial support for innovation, and the dissemination of research and innovative ideas.

There are a number of very important implicit assumptions underlying the prevailing conception of the federal role. The first is that the enterprise itself -- our educational institutions -- was in pretty good shape. The core problem was to provide access to those who had not participated fully. The solution was the creation of entitlement programs that directed federal funds to the students that needed them and regulations that made sure that the goods and services these funds would buy were actually made available to those students. To the extent that new approaches to the delivery of services were needed, the next implicit assumption was that the educational institutions would adopt sound ideas for improvement, if research could show that they were effective and if the federal government would provide funds to cover the unusual costs of implementation. There were some in government and out, mostly clustered around the now-defunct Office of Economic Opportunity, who entertained different views, but their strongly disestablishmentarian orientation had little effect on the course of events. In the main, then, the implicit assumption underlying prevailing conceptions of the federal role in education was that, while there were critically important problems with respect to equity of access to the benefits that the education system could provide, the education system itself was reasonably sound. Even when the alarm was sounded in the early years of the Reagan administration in A Nation at Risk, the message was that all would be well if the standards formerly in place could be restored.

That was not the view, however, taken by those who produced the reports that led what has come to be called the 'second wave of educational reform.' The recent reports from the Committee for Economic Development, the Carnegie Forum on Education and the Economy, the National Governors' Association and the Holmes Group of research university education deans have all been based on the premise that the structure of the system itself is at issue, that the incentives provided professional educators by public policy have to be changed in fundamental ways.

It will not be possible, we believe, to reverse the steady growth of an American underclass, to produce much higher levels of achievement for most American high school graduates, to greatly improve the quality of output of our schools without incurring unacceptable costs, and to upgrade radically the skills of the adults now in the workforce without major changes in the structure of our educational institutions.

These views are shared by the American public, by many if not most of the nations' governors, by leading journalists and many others in a position to influence the outcome. In recent decades, the politics of education had become the politics of dividing the pie. Increasingly, as the pie has gotten smaller and performance of the system has fallen, all but the most uncomprehending or intransigent have come to see that the system itself must be redesigned and rebuilt. It is becoming apparent that an effective political and institutional consensus can actually be built around radical proposals for structural change in education.

By far the greatest achievement of the Kennedy-Johnson-Nixon years was what now appears to be almost universal acceptance of the proposition that the federal government has a special responsibility and an enduring role in assuring that the most vulnerable people in our society get a decent education. The problem, however, was that the government's role in meeting its responsibility to provide equity was defined mainly in terms of entitlement programs.

The modern federal role was created during the longest sustained period of economic growth the nation had ever seen. It is relatively easy to be fair to the most vulnerable when there is plenty of money to go around. But when the economy turned down, and the schools' performance with majority students came in for bitter criticism, it seemed to many that the demands of fairness must give way to the demands of necessity. For a lot of people in powerful positions, it seemed necessary in the circumstances to reduce federal money for education overall, and to emphasize quality at the expense of equity, wherever the two appeared to be in conflict.

The belief that equity and quality are in conflict is almost inevitable if one believes that the structure of the system is basically sound, because, if it is, then the only way to get more out of the system is to spend more money, and, if money is tight, and majority students are not performing well, then most people will vote to put scarce funds behind the majority students. In retrospect, defining the federal role largely in terms of fairness and entitlements only increased the likelihood of this outcome.

Emphasis on issues of access was also the hallmark of the federal role in higher education in the same period. It was a period of enormous growth in the college age population and of increasing demand for higher education among those who were eligible. Following the lead of Clark Kerr's Carnegie Commission on Higher Education, federal policy put the federal dollar behind the student, not the institution, providing proportionately more dollars to those least able to afford higher education. Now, however, the growth curve of college-age students is down, and concern is rising about the quality of the products of the system. While there are very good reasons for funding students rather than institutions, one consequence of such policies is that it becomes harder to affect the quality of the education that is offered by the institutions. Here again, issues of quality and equity stand in bold relief. The proportion of black high school students going on to college is actually declining, and excess capacity in the higher education institutions, combined with rapidly rising costs, is leading many institutions to relax standards at the very time when policy makers are increasingly concerned about what the public's dollar for higher education is actually buying. The context for federal policy in higher education is very different from that in the 60's and 70's, and there is no consensus on what that policy should be now.

Finally, it is increasingly clear that much of the country's economic fate hinges on the skills and abilities of the people who are now in the labor force, both those who are employed and those who are not. It is just as clear that much depends on radically upgrading the skills of many of those people. This actually understates the case. The failures of the traditional education system have combined with the steadily rising education requirements of employers to produce a growing underclass of unemployed and marginally employed people. The federal role with respect to this central and potentially explosive problem does not need redefinition -- it has never been defined at all. The implicit premise of federal education policy has been that education takes place before one enters the workforce. The issue of how to provide a high quality education to the millions of people now in the workforce who have never had one is a new -- and urgent -- issue.

It is necessary to take a fresh look at the federal role in education at three levels -- in elementary and secondary education, in traditional postsecondary education, and in relation to a relatively new problem, the education of people now in the workforce -- in each case because the context for policy is greatly changed from the time when the current federal role was defined. There is another compelling reason to reexamine the federal role. The federal education programs of the 60's and 70's were created in significant measure out of impatience with the lack of leadership from the states on education issues the country as whole thought very important. The shoe is now on the other foot. In the 80's, governors, legislators, and state education officials of both parties have clearly led the way in conceiving and financing bold new programs of education reform. The vanguard of the second wave of education reform was the states and the governors, not the federal government, held the key.

Any effort to rethink the federal role in education, then, must take into account the implications of this resurgence of state leadership in education. Rethinking the federal role means rethinking the relationship between the federal, state and local levels of government in making education policy.

Fundamental institutional reform is badly needed in education at every level, but will not be as widespread or proceed as rapidly as it must unless the federal government plays a vital leadership role in bringing it about.

To play that role, the federal government will have to make institutional performance, not access, the central object of its policies. This is not a thinly veiled argument for quality over equity. The federal government needs to make the performance of the system for protected populations its principal concern.

What do I mean by focussing on institutional performance rather than access? In a nutshell, the federal government needs to be very clear about the kinds of outcomes that are wanted for the populations of interest -- low-income and minority urban students for example -- and provide real rewards to service providers that do a good job of meeting those needs and real penalties for those who fail.

The federal government needs to be relatively indifferent to which agency or combination of agencies gets and uses federal monies to deliver services to clients. But it should not be indifferent at all with respect to whether the clients' needs are actually being met.

This is very different from the way in which most federal programs are structured. Federal policy usually designates the service provider, giving that institution a monopoly in that field. Payments are usually based on the number of clients served and the amount of time they spend in the seat. It is typically the case that the amounts paid to a service provider are totally unrelated to the quality of the service provided as measured by the progress the client makes against the program goals. As a matter of public policy, we simply hope for the best.

The central problem in creating a very high quality American workforce is creating very high performance education, training and retraining institutions. There are powerful international competitive forces at work on American private enterprise to greatly raise productivity, efficiency and performance. In the private sector, the penalty for failure on these points is the failure of the business. There are no such pressures on public sector institutions, though, for the society as a whole, no less is at stake. It is up to the federal government, working hand in glove with state governments, to figure out how to put comparable pressures on the public institutions on which the quality of the

American workforce depends. That must be the primary aim of federal policy for education, training and retraining.

Representative **Scheuer**. There is now a rollcall vote on, so I am going to declare another 15-minute recess. There is the possibility that there may be another rollcall within 4 or 5 minutes after this rollcall. I am coming right in at the end of this rollcall, so the wait won't be very long, and I hope very much that you can all wait for a few minutes.

[A 15-minute recess was taken at this point.]

Representative **Scheuer**. I appreciate very much your all having so much patience.

Mr. Tucker, you just ended up your testimony by saying that a comprehensive overhaul of our entire education system is in order. It is a system that has produced failure, and as Mr. Glasgow's black young man out in Watts said, in no other element of society, whether it is a business or a university or hospital, would failure be rewarded by perpetual funding and perpetual existence.

It is a big, cruel world out there, and for most institutions they get rewarded with funding, only if they succeed. If they don't, society generally finds a way of wiping them out.

But the schools seem to thrive on failure. This is because teachers, principals, custodians, their unions, as in the New York City School System, have a great deal of institutional power. They are rigid, they are frozen in time. They don't yield to demands for change, and they are real bulwarks to change.

When it comes to accountability, even the teachers haven't very much welcomed tests and reviews. There are a few exceptions.

Al Shanker, a very enlightened spokesman of the American Federation of Teachers, says that they will be ready when we devise the right kinds of tests.

How do we go about effecting major changes in our elementary and secondary institutions in this country including the schools themselves, the principals, the teachers, the custodians, the whole ball of wax?

Mr. **Tucker**. I don't think that the people who work in our schools are any less bright or any less well motivated than anybody else in the society. They are in fact just as bright and just as well motivated as anyone else in our society.

What they are responding to are the incentives that the system they work in provides to them, just as all of the rest of us do. It is an article of faith with me that if any of us worked in the schools, within a short time we would behave exactly as the folks who work in the schools have behaved for decades.

So if you want to change the way they behave, then what you have to do is change the system. That seems clear enough.

Now, I think you are absolutely right for all kinds of reasons. Perhaps most of the professionals in the system and most of the organizations who represent them are afraid of changing the current rules because they are not at all sure that they are going to like new ones better, and they are mostly afraid they will like them less.

And that being the case, the only thing that can work is if the society as a whole is persuaded that there is a great deal at stake and if, in the second instance, the people who represent the public—and that is legislators, Governors, Presidents, people like yourself—translate that public concern into new rules for the system which will change the system itself. I don't know any other way to do it.

Right now the fundamental set of incentives in school systems runs on something called ADA, average daily attendance. If you want to get ahead as an executive in a school organization, you do it like you do in any other organization. You want your organization to get bigger, to have more money, and to have more employees.

All of us want to be associated with an organization that is bigger and better. That is how we increase our paychecks and our status and our prestige. The way to do that in a school district is to increase the amount of money that comes into it, and the way to do that is to increase average daily attendance. It is as simple as that.

So what the top managers of a school district get rewarded for is what any regulated monopoly gets rewarded for, which is increasing the customer base, in this particular case the number of kids in the system and the length of time they stay in it. That is how the system is organized.

So if you are a school superintendent, you want the maximum number of kids there, you want them there for as long as possible. That is what we reward.

What we have got to do is to change the fundamental nature of the system so that it doesn't just reward the number of kids in the system and the length of time they stay in the seat but rewards performance. We have to find every conceivable way we can do that. As members of school boards, as members of State legislatures, as Governors, and as Members of the United States Congress, we have to find ways to reward performance.

That is, for me, the answer to your question. It is the only one I have got.

And you will ask, well, is there going to be resistance to that on the part of professional educators and organized lobbies? And the answer is, yes, of course there will be, and we would probably join it if we were in their camps because we wouldn't know whether what was coming was going to be better or worse than the system we had been living under.

I don't hold that against those folks, but I think it is up to people who aren't in the system to let the public know what is at stake here, to provide support to enlightened people in the system who want to move this way—and there are a number of them—and to present the case as effectively as we can to people who make the rules that this is the way we have to go, that there is a great deal at stake and we cannot afford to do otherwise. I know no other way to do it.

But part of that, it seems to me, is to carry on this conversation at another level of rhetoric; that is, not just to sound the alarm but to come forward with concrete proposals, ways in which you can incorporate these incentives into real laws that apply to real organizations in very concrete ways.

And I would hope, by the way, that the Federal Government might invest more of the money available to it for research and development purposes in bringing people together over time to think through how we might change the system in practical ways.

The sad thing is that despite the very large number of people actually involved in education—and it is enormous in this country——

Representative SCHEUER. There are about 400,000 teachers in New York alone.

Mr. TUCKER. There are 2.3 million teachers in the elementary and secondary schools. That does not account for the people—the administrators, the people in higher education, and it goes on and on.

The point I am making is there are only a handful of people in this country who devote a significant part of their day every day to thinking about how you might make this system better, how you might change these incentives, change the structure of the system so that you could improve the performance of this multibillion dollar enterprise.

Representative SCHEUER. It seems to me that at 110 Livingston Street in New York there are an awful lot of people spending their days figuring out how to resist change and how to resist appropriate responses to their long and deeply embedded pattern of failure.

Mr. TUCKER. We have got to increase our investment, I think, in the number and quality of people who think about full time how to change it, how to make it better—policy analysts, researchers, folks on whose ideas this country can draw when it is prepared to make the change that we have to make.

Representative SCHEUER. Mr. Glover, you have described to us a lot of the good things that are going on in Germany that are appropriate for us and that would be helpful and could be integrated into perhaps our secondary school system and some postsecondary systems, too.

How do we convince the powers that be that it is worth overcoming the obstacles that are there to take the best elements of the German system and intrude them into our systems?

Mr. GLOVER. I think we have to work with industry and get them convinced. Right now there is underway a major rethinking of the American apprenticeship system.

By the way, you may or may not know, we have an apprenticeship system in this country. However, it is highly oriented to the construction industry, and it is quite small. It is about 250,000 apprentices as opposed to 1.8 million apprentices in Germany.

But right now there is—we are at the very beginning stages of rethinking that system. The Labor Department is about to sponsor a series of hearings about apprenticeship.

All of the State labor commissioners——

Representative SCHEUER. Where are those hearings going on?

Mr. GLOVER. I think there are going to be three of them.

Representative SCHEUER. At the Department of Labor?

Mr. GLOVER. No, they would be across the country.

Representative SCHEUER. Under the jurisdiction of the Department of Labor?

Mr. GLOVER. Yes, under the Department of Labor. They have produced a concept paper which, among other things, deals with the question of how should apprenticeship relate to youth and youth unemployment and all that.

And in another related development, the State labor commissioners and the State apprenticeship directors have unanimously engaged in a dialogue with some industry and union officials to come up with a proposal for a major national commission to look at apprenticeship. It would have to be impartial and bipartisan and involve all of the parties that participate in our apprenticeship system, including workers and their representatives, employers, and public officials. Their proposal recommends an investigation of American apprenticeship and an examination of what the future of the American apprenticeship system could be and should be.

These processes are going on right now, and they are likely to get a lot of endorsements from industry and labor people. If we can keep that process engaged and develop some consensus about future action, I think that we could have a major effect in expanding the apprenticeship concept that Germany is using right now and apply them to youth in our own country.

Representative SCHEUER. Thank you.

Mr. Dezell, given the success rates that you outlined for us in your Writing to Read Program, why do you think that every school district in the country has not adopted your program or one of your competitors' programs of similar quality to teach their kids, especially school districts in minority neighborhoods perhaps or in neighborhoods with predominantly educationally disadvantaged kids? Why and how is it that you can demonstrate the spectacular pattern of success that you have given us without school systems around the country picking it up and figuring that this has got to be a cost effective and indispensable way of getting kids started out successfully on the learning road at a very early age?

Mr. DEZELL. Let me give you some data first. Out of the approximately 3.3 million children that enter the public school system each year, there are probably about 500,000 now that are involved in Writing to Read.

Representative SCHEUER. Involved in the Writing to Read?

Mr. DEZELL. Right. So from 1984, when it was introduced, in the fall of 1984, to 1987, that is not bad progress.

Representative SCHEUER. No, it is impressive.

Mr. DEZELL. So there are about 500,000 children out of the 3.3 million who start their school careers with Writing to Read.

Representative SCHEUER. What kinds of schools and what kinds of kids do those 500,000 include?

Mr. DEZELL. Most of the major cities in the United States have adopted Writing to Read, some completely like Toledo, OH, or Atlanta, GA. Others have like Washington, DC, I think there are 45 out of 70; in New York City there are 20 out of 600. Most of them are at some phase of implementation.

I should tell you that there are some places that do not believe in the Writing to Read phonetic approach to teaching reading. So in some locations, some school districts, the poeple in the—the educators in the school district do not believe that it works and they believe their own systems are better for their children. So there is a small minority of that kind.

Representative SCHEUER. In New York City there are 20 out of 600. What accounts for the 580 who are not in?

Mr. **Dezell**. There are 40 more that will go in within the next 6 months. One of the biggest problems in New York City is getting the wiring. It takes about 15 months from the day you decide to install the classroom until we get the wire strung to plug the computers into because of the union problem.

Representative **Scheuer**. If that were a private building owned by a corporation and they wanted to require it, how long would it take to get it rewired from the point in time in which they made the decision to?

Mr. **Dezell**. I would guess—less than 30 days would be my guess.

And also there are other schools who just flat don't have the money. The Buffalo School System wanted to do it across—and they could not come up with the money.

Tampa, FL, has put in a pilot program, would like to expand it to all of their schools, and they flat don't have the money. So there are also some financial constraints in terms of implementation.

Representative **Scheuer**. Do you think the schools that now believe they don't have the money, perhaps sincerely, would somehow or other be able to scrape together the money if teachers' salaries and principals' salaries were hooked to success and learning progress?

Mr. **Dezell**. I think that is an interesting concept, and I think in many school districts that would cause some change. I think it would be in those districts that either have experienced it in four or five schools and have seen the results internally or those that are convinced, that have seen it in other districts and are convinced——

Representative **Scheuer**. You have enough of a track record dealing with disadvantaged kids all over the country, do you not? You can make a fairly convincing case to any school system that this is probably the most cost-effective investment they could make? Isn't it about $12,000 per school?

Mr. **Dezell**. About that, yes.

Representative **Scheuer**. That is infinitessimal. You are talking about $10 or $20 per kid. That is de minimis. That is negligible.

It is hard for me to understand how in a school that has a multimillion dollar budget they cannot find $12,000.

Mr. **Dezell**. It is interesting. I was telling Marc Tucker at the break. We had a situation where a school district was very concerned about the money spent, and it turned out that by reducing the failure in the kindergarten/first grade level, they could reduce their expenditures by $4.6 million; however—for about a $750,000 expenditure, but that school district gets paid on attendance, and they get paid $4,600 per child whether the child is repeating the first grade or repeating kindergarten or is progressing satisfactorily into the first, second, and third grade. And there is no incentive. There is zero incentive, as Marc Tucker points out, in terms of results.

Representative **Scheuer**. And paying the schools on the basis of attendance isn't sufficient to really motivate that school to think about the changes they can make and the investments they can make that would produce learning.

In other words, what do we have to create in the way of incentives and disincentives for the schools to discriminate between a kid who is warming a seat with his bottom and a kid who is actually involved in the learning process?

We reward them for the first. We don't reward them for the second.

What do we have to do to reward them for the second and to reward the schools, the teachers, and the principals, for having produced that learning result that we are looking for?

Mr. DEZELL. I don't think that I have the answer, and I am not sure that any of us has a specific answer to that question.

Representative SCHEUER. That is a pretty key question, don't you think?

Mr. DEZELL. Yes, and it is a difficult question because the measurement system is also imprecise.

Representative SCHEUER. This is the case——

Mr. DEZELL. That is one of the things we need to figure out what to do.

Representative SCHEUER. The measurement systems are imprecise, and I am not sure whether Al Shanker is telling us something good or bad when he says that he will accept this kind of teacher accountability when he is satisfied that the measurements are accurate.

I suppose you can always defer a decision until you can figure out how many angels can dance on the head of the pin. You will never get a perfect system. There will always be variables that the system cannot account for, but this may be a case where the perfect is the enemy of the good.

We don't have 535 perfect Members of the House of Representatives and the Senate, but we rely on this sort of rough, sometimes circus-like decisionmaking process on the part of 435 congressional districts and 50 senatorial districts. It is by no means a perfect process, but this system has a way of bringing to the surface 535 very hardworking and rather unusually competent people.

If you looked at those Presidential candidates the night before last on television, you would have to say to yourself, whether you are a Democrat or a Republican, that the crazy quilt American political system has produced a dozen, a baker's dozen, of pretty impressive guys.

Now, that is not to say that the system is perfect, but in actual living experience, be it a business, a university, a hospital, a political system, we don't demand perfection in our systems. We try to do the best we can, and then we go for it.

Are we going to have a real problem with teachers and principals because we cannot achieve an accountability and measurement system of learning progress that is perfect and invulnerable to any kind of criticism or questions? Do we have to wait for that day in the far distant future before we change anything? Do we have to know everything before we can do anything?

Mr. DEZELL. It seems to me we are really in the ditch, that the educational system in America is broken, and if we are going to fix it we are going to have to change the attitudes on the part of the educators and get them performance oriented. And even if we put in place a measurement system that is not perfect, if we can use that to change the attitudes toward performance versus people just going and being there, I think that could have a dramatically positive effect on the education system.

I don't know what you think about that, Mr. Tucker.

Mr. TUCKER. I think that is absolutely right. There are lots of things that we can agree about—all of us—what we want for our kids and for our schools. We ought to start there.

I think you said it exactly right. The name of the game is to get the thing performance oriented, and even if you haven't captured everything you care about, we would be a lot better off were we to move in that direction. No question about it.

A lot of people say to me you are borrowing a system from American business and industry that has a very simple bottom line. It is simply a question of profit, and it is much more complicated here in education.

I think most people actually misunderstand badly what goes on in organizations like yours. That is to say, you can have profit and loss statements for National Marketing or for Education Systems at IBM, but there are countless pieces of your organization whose work is only indirectly related to profit, and you somehow in each one of those pieces of your organization have to set some kind of goals and make some kinds of judgments about how well the people in that unit have addressed those goals.

Representative SCHEUER. Do you think he has perfect information?

Mr. TUCKER. He has far from perfect information when he or any of the folks like him and countless businesses and industries in the United States make those kinds of judgments.

Representative SCHEUER. In other words, except for the people in the Eighth Congressional District of New York who had perfect information and who exercised 90 percent judgment in my favor in the last election, most other decisionmaking in this country—at the corporate level, the educational level, the business level, the political level is considerably less than perfect. But the results are not too bad. They are pretty credible.

Mr. TUCKER. This is right.

Representative SCHEUER. So is it a fact that we have to convince the education community that they have to learn to live with measurements of success or failure and that they have to live up to standards of accountability more or less of the kind that the rest of society lives with and manages to cope with?

Mr. TUCKER. The educators also say, with justice, we don't have complete control over the circumstances in which we work or the materials with which we work.

Representative SCHEUER. Which of us do?

Mr. TUCKER. That is the point I was about to make. The folks at IBM do not have control over the business environment in which they work. The prices of commodities that they have to use rise and fall.

Representative SCHEUER. There are a thousand different things that IBM doesn't control and will never control and which they know they can't control, but they go ahead and make decisions as best they can.

Mr. TUCKER. That is absolutely right.

Representative SCHEUER. They have to live with society's measurement of success or failure based on market forces, even though that is not 100 percent fair perhaps, because there are those elements that vitally affect their future that they cannot control—currency exchange rates, access to markets, and so forth.

But life is not 100 percent fair to IBM. It is not 100 percent fair to any of us, and I suppose from that point of view don't the educators of our country have to accept that these measurements and this standard of accountability may not be 100 percent fair but they are going to have to live with it the same way that all of us—corporations, individuals, and institutions of all kinds—live with it?

Mr. TUCKER. I think that is right. I think the schools need to learn a lesson that some of the best business corporations are learning in the United States, which is that if you are going to hold the folks in the school accountable you do have to do the best job you can do. And here I am speaking really to the school boards and the top administrators. You have to do the best job you can do of pushing decisionmaking down to the school level.

It is unreasonable to hold people in individual schools accountable now because they have so little control. So many decisions are made at 110 Livingston Street that it is unreasonable to hold the people in the individual schools in the New York City system accountable.

Many, if not most of the decions made at 110 Livingston Street ought to be made in individual schools, and you ought to be able to hold the people in those schools accountable in large measure for the results of their work. You cannot do that now.

Mr. GLOVER. The other thing is we know enough about performance standards to know that the same performance standards are not established for every teacher, regardless of what kinds of kids they have. So teachers of disadvantaged kids ought to have——

Representative SCHEUER. Mr. Glover, any measurement system, any accountability system would be designed to take those factors into account.

Now, they may take them into account imperfectly, but they would be designed to take those factors into account.

Mr. GLOVER. Exactly.

Mr. TUCKER. We have talked about measuring student progress, not performance. What is important is what value is added each year to those kids, and so what is terribly important is to ask the question when you have got a number of schools, each serving kids with about the same kind of background, which of those schools is making more progress for those kids than the average. That is a fair question to ask.

In fact, it is a very important question to ask. It is the teachers of those kids and their principals who ought to be rewarded. If they are doing much better by a bunch of kids who are very like another set of kids down the road, they ought to be rewarded for that.

But if you end up rewarding student achievement, then all the teachers and the principals are going to run off and teach the easiest to teach kids. That is not the system you want.

So in my view it is really student progress, value added in economists' terms, that ought to be rewarded, and it is perfectly possible to devise systems that will do that.

Mr. DEZELL. The other thing that I think is exciting is that I am absolutely convinced that children from all spectrums of the economic spectrum—all parts of the economic spectrum have enormous growth capability. When you see a whole school district scoring, averaging the 91 percentile on an achievement test——

Mr. TUCKER. As in Burlington.

Mr. DEZELL [continuing]. That says that you have gotten performance out of the children that is dramatically higher than what you normally would expect, and we are just not getting that across the country from our children—even middle-class children—we are not getting that kind of performance.

Representative SCHEUER. One of the big problems of our education system is that we treat our successes like our failures.

There shouldn't be any question about the kind of product that you produce and that your competitors produce, Mr. Dezell.

There shouldn't be any problem about understanding the value of a Head Start Program, or a follow-through program, but somehow or other we don't treat our successes, no matter how spectacular and indisputable they may be, as successes. We treat them like our failures, and we have got to stop doing that.

Well, we have been at it for well over 4 hours this morning.

I apologize for our late start and for the interruptions, but I want to thank you for your remarkably interesting and thoughtful and creative testimony. We are very much in your debt.

We will be writing a report, and I am going to ask unanimous consent for the record to be held open for 10 days or 2 weeks so that we may submit, if the thought comes to us, some additional questions in writing. I am going to declare this series of hearings closed, with thanks to all of the witnesses who participated.

Thanks to all of you, and a special thanks to our friend and colleague and mentor, Marc Tucker, for his prodigious contribution.

[Whereupon, at 12:45 p.m., the subcommittee adjourned, subject to the call of the Chair.]

[The following letter, together with an attached statement, was subsequently supplied for the record:]

Department of Labor
State of North Carolina
214 West Jones Street
Raleigh 27603

John C. Brooks
Commissioner

December 3, 1987

The Honorable Paul S. Sarbanes
United States Senator from the
State of Maryland
Chairman
Joint Economic Committee

The Honorable James H. Scheuer
United States Representative from the
State of New York
Chairman
Subcommittee on Education and Health
Joint Economic Committee
Congress of the United States
Washington, D. C. 20510

Re: Testimony before the
Subcommittee on Education and Health
of the Joint Economic Committee
December 3, 1987

Dear Sirs:

While I am not scheduled to appear today before the Subcommittee on Education and Health of the Joint Economic Committee, but rather have come to listen to Dr. Bob Glover of the University of Texas make a presentation, it has nevertheless occurred to me that I do have some thoughts to share with the members of this subcommittee in behalf of the National Apprenticeship Program.

It is my sincerest hope that Congress will act to amplify the ability of the Apprenticeship system to meet our national needs for skilled workers to the end that we will, once again, become the world's leading competitor amongst the industrialized nations.

This is to respecfully request that the attached remarks be read into the record of this Subcommittee.

Sincerely yours,

John C. Brooks

John C. Brooks

Statement of

John C. Brooks
Elected Commissioner of Labor
State of North Carolina
Chairman, N.C. Apprenticeship Council
Treasurer, National Apprenticeship Program

before the
Subcommittee on Education and Health
of the
Joint Economic Committee

On Apprenticeship in the United States

Washington, D.C.

Thursday, December 3, 1987

First I want to express my appreciation and that of the National Apprenticeship Program to you for these hearings and for this opportunity to appear before the subcommittee in the interest of apprenticeship. Apprenticeship is a practical, effective, and cost efficient mechanism for the training of the essential high skilled workers in American industry and business. It is my sincerest hope that Congress will act to amplify the ability of the Apprenticeship system to meet our national needs for skilled workers to the end that we will, once again, become the world's leading competitor amongst the industrialized nations.

THE NATIONAL APPRENTICESHIP PROGRAM

The National Apprenticeship Program is the co-operative effort of the National Association of Government Labor Officials (the organization of state labor commissioners and their counterparts) and the National Association of State and Territorial Apprenticeship Directors (the organization of government agency directors who promote, organize, develop, register, and certify professional apprenticeship training has been principally that of state governments for many years. Thirty-two states and territories perform the tasks of determining which high-skill crafts are apprenticeable in their respective jurisdictions and of registering those privately sponsored apprenticeship training programs that qualify.

APPRENTICESHIP

Apprenticeship is the age-old custom of training high-skill craftsmen by indenturing an apprentice (a trainee) to a journeyman craftsman in his chosen trade or to an employer who in turn employs a journeyman. The employer promises to train the apprentice, through on-the-job experience and related instruction, in all the skills and knowledge about the particular craft. Apprenticeship training recognizes the essential requirement that a journeyman achieves proficiency in his craft, not just a mastery of the knowledge and theory about the craft.

Apprenticeship in the United States is a totally voluntary system of training. The sponsors elect to sponsor a program to train their most highly skilled workers, and the apprentices elect to be trained through apprenticeship.

There are about 800 apprenticeable occupations currently recognized in the employment community of the United States.[1] Apprenticeable occupations traditionally include silver and gold smithing, the eighteen building industry trades (such as carpentry, plumbing, and electrical work), and the industrial manufacturing trades (such as tool and die makers, machinists, and boiler makers). More recently recognized apprenticeable occupations include several in the allied health sciences where for example an apprentice can learn to become a laboratory technician, X-ray technician, or an industrial hygienist. The range of apprenticeable occupations is all-encompassing of the high-skill crafts. Diamond cutters, airplane jet-engine mechanics, diesel engine mechanics, elevator mechanics, loom fixers, computer programmers, and deputy sheriffs can all learn their trade through apprenticeship.

In 1937 the Congress enacted the Fitzgerald Act [2] which established the basis for a formal apprenticeship system in the United States. The Act is short, vague, and general. A significant labor-force training program, nevertheless, has been developed within the parameters of this legislation during the forty-six years of its enactment. The current federal apprenticeship program, however, reflects the strains resulting from the Fitzgerald Act's vagueness. There is an urgency for the Act to be amended or replaced with legislation that establishes a more definitive federal apprenticeship program capable of producing the number of journeymen craftsmen needed by industry as we attempt to revitalize our economy during the remainder of the twentieth century.

New legislation should specifically provide for a national system of determining apprenticeable occupations and for the establishment of uniform minimum standards and criteria for each recognized craft. Apprentices should not be forced to acquire their related instruction from expensive correspondence courses of questionable quality or from proprietary material that is not generally available. Access to propriety materials is oftentimes contingent upon the condition that the apprentice either work for an exceptionally large employer or belong to a prescribed labor union, or both. New legislation should provide for the federal government to design, manufacture, and distribute related-instruction materials for each of the recognized apprenticeable trades.[3] For most trades there should also be produced a self-instruction audio-visual curriculum of related-instruction material. These instruction materials should be available to the public at very modest purchase and/or rental prices.

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[1] The "Dictionary of Occupational Titles" lists 24,000 jobs performed in the United States (Ray Marshall and Ernest G. Green, "Dictionary of Occupational Titles," 4th ed. [Washington, D.C.: U.S. Department of Labor, 1977]).

[2] A copy of the Fitzgerald Act is attached as app A. At the time that the Fitzgerald Act was enacted, the Congressional Record for the House (1937) shows that the expenditure of $56,900 to operate the system was contemplated. The immediate preceding issue was the funding of a monument to Will Rogers in the amount of approximately $500,000, which was approved without debate.

[3] At the time that the Congress was considering the enactment of the Fitzgerald Act in 1937, the U.S. Department of Labor and the U.S. Office of Education sent a "Joint Memorandum to the chairman and members of the Subcommittee on Appropriations for the Department of Labor, House of Representatives," a copy of which is attached as Appendix B, which stated in pertinent part:

"[T]here are two distinct groups of responsibilities and functions in the promotion and subsequent operation of plans for apprentice training. One group deals with the apprentice as an employed worker—the conditions under which he works, his hours of work, his rates of pay, the length of his learning period, and the ratio of apprentices to journeymen so that overcrowding or shortages of skilled workers in the trades may be avoided in large part. The second group of responsibilities deals with the apprentice as a student—the related technical and supplemental instruction needed to make him a proficient worker and the supervision and coordination of this instruction with his job experience."

The memorandum contemplated a cooperative relationship between the U.S. Department of Labor and the U.S. Office of Education in behalf of a formal apprenticeship. In the forty-six years since the enactment of the Fitzgerald Act the contemplated relationship has failed to materialize and the Office of Education, now Department of Education, has yet to develop any curricula that complements formal apprenticeship. Nor is there any evidence that the U.S. Department of Labor has ever initiated any invitation to the Office of Education to assist in any way in promoting quality apprenticeship.

New legislation should also provide for the development and validation of competancy examinations for each apprenticeable skill. The legislation should also provide for the development, manufacture, and distribution of promotional materials for each trade.

This legislation should become one of the cornerstones of a deliberately promulgated national manpower development strategy and program.

APPRENTICESHIP UTILIZATION

The low level of utilization of apprenticeship in the United States is a major contributor to the continuing problems of the nation in meeting competition for world markets. As an example, while the United States presently registers less than 300,000 apprentices in all age groups, one of the United States' most effective competitors, Germany, registers approximately 628,000 apprentices in just the 16- to 18-year age range, which is approximately one-half of the German citizens in that age range. If North Carolina, alone, registered a proportionate number of 16- to 18-year olds as apprentices, there would be at least 170,000 apprentices in the State.

In North Carolina there are presently approximately 1,350 of these voluntary sponsors of apprenticeship training and about 2,550 registered apprentices in training. It appears that there is a need in North Carolina alone for training opportunities to be in place for at least 20,000 [4] apprentices if the State is to meet the most minimal needs for skilled craft workers in the immediate future.

Most of the industrialized nations with which the United States competes for international markets provide either significant incentives to operate apprenticeship programs or significant penalties for failure to operate apprenticeship programs. At present the only instance of such incentives that are in effect in the United States is the Davis-Bacon Act which provides wage incentives to contractors doing business on federally funded construction projects. Not even the new Jobs Training Partnership Act provides any realistic opportunity for an employer to recover a significant portion of the training investment for apprentices through government support. Clearly, there is a substantial need for incentives to encourage the private employer to take action to train the highly skilled craft and trades workers that the United States needs in order to be an effective competitor in the international marketplace.

MEETING THE NEEDS OF THE NATION'S ECONOMY

Today we are addressing one of the four horsemen bearing economic chaos. The four horsemen, of course, are the federal annual deficit which is approaching 200 billion dollars this year, the deficit balance of payments which continues to set new records each successive quarter, the default in international private lending institution's loans, and the dearth of high skilled craftworkers.

An unrecognized cause of inflation is the growing scarcity of the nation's high-skill labor force. Although the United States continues to produce a steady supply of journeyman craftsmen, it is also producing an expanding work force amidst a second industrial revolution. Micro-electronic computerized robots are replacing many unskilled workers. (Unskilled workers are those persons who have less than six months of specific training for the tasks required by their jobs and/or who have less than a high-school equivalent education including reading, writing, and mathematics). While the unskilled workers in an expanding population experience increased difficulty in finding a job, those few trained in newly developing occupations are in great demand, thereby commanding higher wages. Increasing the number of skilled craftsmen will moderate labor's wage demands while also reducing unemployment.

Apprenticeship programs offer relief for the vicious economic cycles that have plagued this country in recent years. Even during prosperity the nation has a base workforce of 10,000,000 people who lack marketable skills in today's economy. Add to this figure the number of persons who are displaced because of the current recession and also those persons who lose jobs because of the new industrial revolution and the result is an economic crisis. Until the federal and state governments recognize this problem and implement programs capable of remedying the situation, continued cycles of inflation, recession, and possibly depression are in store for the nation.

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[4] Attached as app. C is a news release of the N.C. Department of Labor setting forth "Anticipated Annual Average Job Openings for (39) Priority Occupations" for 1983-90. In only the 25 apprenticeable occupations reflected in this one analysis there are anticipated to be some 27,266 new job opportunities in North Carolina annually.

Inflation results from the operation of the "free-enterprise," "demand and supply" theory. While the theory is old, it still works. When the demand for goods and services cannot be met by supply because there are insufficient craftsment to fill the critical ten to twenty percent of the jobs found in most industries, the wages or salaries of those who possess the required skills are bid up. This is precisely what has occurred in the United States in recent years and what is also likely to occur during the remainder of this decade.

For the past five years, the nation's high-skill craftsment have demanded and received wage increases of approximately 25 percent to 30 percent per year—this is nearly three times the national rate of inflation. In fact, these increases are, and will continue to be, one of the causes of inflation. Today's high-skill labor force is at near full employment just as it has been for the last forty years. Skilled labor in all probability will continue to enjoy this status at least for the rest of this century. Thus, it is critically important that the United States put into place a high-skill training program capable of dramatically increasing the numbers of journeymen-level craftsment in the nation's work force.

In an excellent study of the United States' manpower development programs and lack of national manpower development policy and strategy, Dr. Robert Taggart writes in his monumental work "A Fisherman's Guide: An Assessment of Training and Remediation Strategies" as follows:

"It is human nature to neglect and squander resources which are plentiful. It is also human nature to react with alarm and surprise when these same resources later become scarce and valuable. For decades, our nation has had a surfeit of unskilled and entry workers, the result, first, of rising agricultural productivity and rural migration, and, subsequently, of increased female labor force participation and the coming of age of the post-war babies. Because these human resources were plentiful, they have been wasted and disdained. As a nation, we have concentrated our investments on higher education and advanced levels of preparation for those best able to compete in and contribute to the labor market. Persons of limited employability have been provided income maintenance, makework, and remedial band-aids in order to assure minimum well-being and to buy social peace.[5]

Dr. Anthony Patrick Carnevale, writing in "Human Capital: A High Yield Corporate Investment" in 1982,[6] wrote:

"[W]hile we have learned to value people for their purchasing power, we have not seen them as critical resources for production.

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"Unfortunately, our misconceptions and the biases of our recent history are threatening our nation's economic future.

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"We cannot compete for low wage, low skill production markets.

"Our real competitors are the other, 'more developed' countries. As the pace of technological change accelerates, competitive advantage depends on our ability to adapt, to apply new technologies to production and to integrate human skills with new machine technology. Adaption will be all the more difficult as product life and skill life become shorter and shorter. Ultimately it is the rate at which we apply new technologies and integrate them with ready labor that will determine our success. As the international rationalization process accelerates, the constant and optimal shifting of human and machine resources will be required, as will the constant retraining of the workforce."

In and address before the Southeastern Atlantic Coastal States Regional Conference sponsored by the American Council on Education Commission of Higher Education and the Adult Learner, C. C. Cameron, chairman of the board of the North Carolina Citizens for Business and Industry, "The Voice of Business," stated the forecast as follows:

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[5] Report Taggart, "A Fisherman's Guide: An Assessment of Training and Remediation Strategies" [Kalamazoo, Michigan (300 South Westnedge Avenue, 49007): The W. E. Upjohn Institute for Employment Research, 1981], p. vii.

[6] Anthony Patrick Carnevale, "Human Capital: A High Yield Corporate Investment" [Washington, D.C. (600 Maryland Avenue, S.W., Suite 305, 20024): American Society for Training and Development, 1982], pp. 1 and 6.

"Enlightened businessmen believe they will have to retrain their employees every four to five years. Some say we are on a four-year technological obsolescence cycle, down from the 10-year cycle it was at about 15 years ago." [7]

Dr. Carnevale continues his assessment of the situation by saying that:

"The economic effects of population decline are already upon us. Overall shortages of workers are hidden, however, under the cloak of the current high rates of unemployment. Recovery will reveal this overall shortage quickly and dramatically. In the 1970s, for instance, even the slower rates of growth produced 19 million new jobs for new workers. As the effects of population decline begin to impact in the 1980s, there will be only 16 million new workers. If the eighties achieve even the middling rates of economic growth characteristic of the seventies, the economy will generate a minimum of 19 million new jobs, creating a gap of 3 million jobs for which there will be no workers.

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"The long view of economic history teaches us that people are the master economic resource. They are the master resource because they use their acquired skills and abilities as the catalytic agents that combine tangible elements and intangible ideas to make machinery and usable goods and services. In spite of that fact, there is a great temptation for employers to ignore the long term value of human investment. This is especially true in times such as these when investment capital is short and unemployment lines are long. Secondly, in the short term, individual employers are faced with the prospect of losing their investment in people. Employees are mobile and machinery is not. When one employer invests in training and development, another can invest in wages and pirate employees at the completion of their training. Lastly, when jobs are in short supply, there is an equally great temptation to rely on a quantity of cheap labor rather than a quality few. With jobs available for only one in ten unemployed workers, it is indeed a buyer's market.

"Although employers generally appreciate the longer term yield of current investment in human resources, the press of daily business and the realities of the labor market encourages them to win their share of the nation's skilled workers through wage bidding and not through human resource development. We, as a nation of employers, have been going to the well for some time for skilled workers without replenishing the source of supply. As a result, the long term finally is arriving as evidenced in a spate of statistics that suggest mounting skill shortages, reduced overall quality in the American labor force, shoddy workmanship, unsatisfactory maintenance and wages which are not balanced by worker productivity. Further, attempts to improve productivity by increasing machine capital are proving costly and are resulting in protectionist resistance among current workers who are concerned for their own job security. Individual firms that once found it profitable to buy skilled workers by bidding up demand now find the price high, the supply short, and the quality low. What was good for individual employers has proven costly for all.

As a society, we will have to discover new mechanisms for employers to realize the longer term benefits of employee training and human resource development. Public incentives that place investment in human resources at least on a par with investment in machinery will help. Federally operated training programs for skill shortages which do not have the accountability of the workplace will only be marginally effective. In the final analysis, resolution of the problem depends on the willingness of employers to look beyond the short term economic dynamics that discourage human resources investment. In the absence of employer-based strategies, however, public programs and regulations are inevitable." [8]

The report of The Preparatory Conference on Private Sector Initiatives, for the White House Conference on Productivity, summarizes the outlook as follows:

"The pace of economic change, the current investment incentive structure, the structure of American industry, demographic changes and repeated recessions suggest that the United States is currently underinvesting in job related training. Additional incentives are required to encourage greater commitment to job training and career development among employees and employers." [9]

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[7] C. C. Cameron, "Higher Education and the Adult Learner: A Businessman Responds" [Speech presented to the Southeastern Atlantic Coastal States Regional Conference sponsored by the American Council on Education Commission on Higher Education and the Adult Learner, Raleigh, North Carolina, Oct. 26, 1983]. (C. C. Cameron is chairman of First Union Corporation a banking institution, Charlotte, North Carolina.)

[8] Carnevale, pp. 1 and 6.

[9] White House Conference on Productivity, "Report of the Preparatory Conference on Private Sector Initiatives, Pittsburgh, Pa., August 2-4, 1983." [Washington: The White House, 1983], p. 59.

THE IMPACT OF A HOUSING SHORTAGE ON THE ECONOMY AND MEETING THE NEEDS OF AN INDUSTRY—THE HOMEBUILDING INDUSTRY—FOR MORE CRAFTSMEN

When the housing industry experiences a slowdown, one hardly thinks about the industry's future need for skilled tradesmen or about the serious shortage of adequate housing that now exists, yet a crisis of grave dimensions in the home-building industry is in the making. In 1981, the home building industry constructed 900,000 units of housing—single family, apartments condominiums, and attached dwellings—to accommodate the "expressed" demands of Americans for some place to live. Unfortunately, this figure represented less than 50 percent of the supply needed (2,000,000 units) to meet the demand for new housing units each year. In 1982, the home building industry constructed some 1,100,000 units of housing. In 1983, the nation will probably realize another 1,100,000 units of housing. When the unmet demand for 1981, 1982, and 1983 is added to the unmet demand from preceding years (approximately 5,500,000 housing units), the resulting figure of 8,500,000 unbuilt housing units poses a significant problem that increases each suceeding year. In prosperous times the nation's homebuilding industry work force, at full employment, is capable of building housing units at the annual rate of 2,000,000 units. Of great importance is the fact that this figure equals the annual demand for new housing units only. Therefore, even at full employment, the construction industry is incapable of reducing the chronic shortage of housing that exists in the United States.

Where has the housing "demand" been? Where was this "demand" in 1981, 1982, and 1983? The "demand" for housing units has been suppressed by high interest rates and by inflation. Typically, buyers enter the housing market when they perceive interest rates to be affordable or at a periodic low. While inflation has decreased to under five percent, real interest has continued to increase and is now almost four times as much as it was when President Reagan took office. The result has been a continued suppression of the home building industry.

The construction industry can meet an increased demand until the number of units being built equals about 2,000,000 units a year. When "expressed demand" exceeds that figure, prices of homes and real estate will again increase sharply because there will be more buyers than there are new housing units. This predictable inflation in real estate and housing will generate inflation throughout the economy. In particular, the wages of home building craftsmen will surge upward as the shortage is recognized, outstripping the national rate of inflation.

Wages and salaries of craftsmen in the home construction industry increase an average of twenty-five to thirty-five percent per year in high demand years. As home buyers are forced to borrow ever larger sums of money, real interest rates will be pushed even higher as home buyers compete with the federal government, foreign governments, and business for available capital. As real interest rates increase, the "expressed demand" for new housing will decrease and construction workers will be laid off eventually and not recalled until real interest rates drop significantly. When buyers re-enter the housing market, interest rates and construction wages again will be driven higher than they were in the previous cycle.

Part of the solution to this cyclic problem must include an expanded partnership between government and business to train a work force capable of accommodating an expanding homebuilding industry. A significant part of this partnership must include expanding formal on-the-job training through apprenticeship. The skills of the working journeyman must be harnessed by an expanded training program to prepare the building tradesmen who will be needed in the near future.

Another part of the solution to this cyclic problem is the establishment of a federal program to stabilize the housing industry and the housing market. One component of such a program would be the elimination of vast fluctuations in the demand for craftsmen in the home building industry. By stabilizing demand, many craftsmen who are routinely permanently lost to the industry during periods of low consumption, would not only be retained, but would develop even greater skill and proficiency. A full description at a proposed federal housing industry stabilization program is contained in Appendix D.

AN EXAMPLE OF THE IMPACT OF A CRAFTSMEN SHORTAGE ON AN INDUSTRY AND THE NEED FOR MORE ELEVATOR INSTALLERS AND MECHANICS

Conditions in the elevator industry present a glaring example where the nation is paying dearly for having an inadequate high-skill labor force. Although the nation continues to experience a recession in the home building industry, the elevator industry is at "full" employment. In fact, the backlog of orders for installations of new elevators is so staggering that the industry has been forced to rehire previously terminated employees, postpone scheduled retirements, and extend the work week just to keep up with the demand for more elevator mechanics. Journeymen elevator mechanics are spread as thinly as possible to maximize the number of teams installing new elevators.

Few journeymen elevator mechanics are being trained in the United States today. The nation is riding on the backs of the elevator work force trained in yesteryear. There is no public institutional curricula for training elevator mechanics anywhere in the country. If meeting construction demands is difficult today, where will the elevator industry be when a recovery in the building industry takes place? If the "demand" for new high-rise buildings increases during economic recovery, there will be unavoidable delays in completion of these buildings due to the insufficient supply of elevator mechanics. As a result, construction costs will increase, thus fanning even more the fires of run-away inflation.

An important part of the solution to this problem must be the inauguration of a partnership between the government and private business to immediately establish a formal apprenticeship program for the on-the-job training of elevator mechanics.

Even this important step will not be without its problems because many journeymen elevator mechanics are unfamiliar with new solid-state technology that is revolutionizing the elevator industry. This added complexity only increases the national urgency for proceeding now with establishing high-quality training programs capable of producing journeymen elevator mechanics in significant numbers

MEETING THE NEEDS OF INDIVIDUAL MEMBERS OF THE WORK FORCE FOR JOB TRAINING

In recent years most training and remediation for persons of limited employability has been provided under the aegis of the Comprehensive Employment and Training Act (CETA). JTPA and now apparently is to be provided under the aegis of the Job Training Partnership Act (JTPA). JTPA allocates federal funds to state and local governments for classroom and on-the-job training, as well as for job creation and other activities. Job Corps is a nationally-operated residential training program for young adults also authorized by JTPA.

It is striking how little this nation commits to improving the employability of those at the end of the labor queue. Under CETA in 1980, there were 700,000 new participants in institutional or on-the-job training, representing just 4 percent of all those who experienced unemployment during the year, a miniscule .6 percent of all persons in the labor force, and less than a tenth of all persons in the labor force at least half the year whose earnings, when combined with those of other family members, fell below the poverty level.

Again Robert Taggart sets forth an astute evaluation of how well the CETA program met the needs of individual members of the work force for job training in his monumental study, "A Fisherman's Guide: An Assessment of Training and Remediation Strategies." Some insightful quotations are set forth below.[10]

"[T]he primary emphasis of CETA has been to provide jobs rather than training, and a helping hand rather than substantive remediation or career ladders. Three-fourths of all local CETA allocatons in 1980 were used for subsidized employment rather than training or transition services. Less than one in fifty terminees from local programs were graduates of more than a year's training.

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"CDTA's planning, budgeting, record-keeping, decision making and management approaches for local programs evolved to accomplish short-term palliative missions; they discourage training investments and undermine training quality.

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"For a disadvantaged individual to attain a high school equivalency or post-secondary training degree, or to learn almost any occupational skill, takes substantially more time than the average duration of CETA training. Only a small minority of participants are assigned to training that is long enough to provide credentials and competences that will help to feed them for a lifetime. Perhaps only a few in a hundred participants have the endurance or capacity for the one-, two- or even four-year training, but it is critical to begin providing opportunities for this minority to achieve 'quantum leaps' in employability.

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[10] Taggart, pp. viii, ix, x, 9, and 10

"Uniform, federally-mandated competency assessment systems should be adopted to measure academic and vocational skill acquisition, to organize individualized, self-paced instruction, to judge the effectiveness of training institutions, and to certify competencies attained.

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"Residential 'corporate career' training and internship programs operated by private sector corporations and associations in their own training facilities should be developed at the national level, with opportunities available equally to all in need who prove their commitment and capacity.

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"Training requirements for career entry jobs in our economy need to be formalized through an expanded and more flexible apprenticeship system.

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"CETA is now essentially a 'one-shot' intervention rather than an employability development system. The participant enters the door, is assessed, assigned to a limited duration component, and then (sometimes) placed in a job on completion What is needed is an opportunity ladder which individuals will mount and scale at the level and pace dictated by their ability and motivation. This, in turn, requires a system for measuring competencies and competency acquisition. It requires standards of completion as well as qualitative standards for inputs. Most of all, it requires that these standards be maintained.

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"[M]ore sorting must be done among those in need. The labor market's leftovers include individuals of widely-ranging potential, and too little is now done for those who have greater ability and motivation.

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"If a second tier of advanced opportunities were added to what now exists in CETA, no one who exerted an effort would get less than under the current system, but those who exerted more effort and had more potential could advance substantially. Alternatively, the second tier might be financed by savings which could be achieved under current programs if they were focused solely on training rather than functioning as stopgaps for persons with no other options. Allowances in classroom training and wages in on-the-job training should be used as a means to reward performance, to cover the extra costs of participation, and to meet only the poverty deficits which would hinder participation, rather than providing an incentive to participate even when there is no desire to be trained. There is room for some savings in this regard, probably enough to finance longer training for a reasonable proportion of current trainees But a tradeoff is inherent: Fewer individuals can be served when longer training is provided with any given a level of resources. While the net result of adding a second tier of opportunities will be greater average and aggregate impacts for those in need, the benefits will be less broadly shared This is only equitable if the opportunity structure is established so that all participants have an equal shot at the longer and more promising training opportunities.

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"Some changes are needed in law, regulations, program design, and management in light of these findings, but the bigger challenge is to alter thought processes which have guided manpower programs and policies for years We must begin thinking about long-term impacts and 'quantum leaps' not just immediate outcomes and marginal gains A stable training system is needed rather than an ever changing array of separate training programs There must be long-term strategies, both locally and nationally, for building a range of new opportunity tracks for disadvantaged individuals with potential. Quality, not just quantity, needs to be emphasized in curricula, in staff, and in outcomes. The employment and training system must, in every way possible, utilize existing institutions rather than maintaining segregated and frequently second-class delivery approaches for the disadvantaged

"Even with such changes, the potential of training efforts for persons of limited employability will be circumscribed unless the institutional setting is altered As long as there are disincentives for training by the private sector, as long as the competencies and training needed to fill available jobs in the economy are uncertain, and as long as help is offered to persons of limited employability as an act of 'noblesse oblige,' public programs will continue to have difficulty determining and meeting private sector needs, private employers will stay at arm's length, discounting the quality of training, and public resources will remain inequitably distributed and overly concentrated on advanced education even though entry-level investments would yield more payoff in the expected labor market of the next two decades. Some of the long-term options which need to be considered are, first, a GI-Bill approach to career training and education, where all individuals would be guaranteed two years of postsecondary training or retraining to be purchased from public and private institutions by voucher; second, employer and employee taxes to cover part of the costs of this career training, with credits where the private sector provides the training itself, in order to encourage more entry training; and third, expansion of the apprenticeship system to formalize the career entry tracks and to identify the competencies and training necessary to perform career entry jobs in our economy."

FEDERAL ADMINISTRATION OF APPRENTICESHIP

As a state commissioner of labor and as president of the National Apprenticeship Program, I want to take this opportunity to call to your attention some concerns that I have about the federal administration of apprenticeship and training which arise from my daily observations of this program for the past six and a half years. At the outset I want it to be understood that I am an advocate of an expanded role for formal apprenticeship training in the United States. Indeed, I am concerned that the nation is not now pursuing a comprehensive manpower training program adequate to produce the high-skilled craftworkers needed today to sustain economic recovery, nor those needed in the near future to support economic expansion.

The federal Bureau of Apprenticeship and Training has been ineffective in recent years. Its current status is one of atrophy. The Bureau does not receive the support it needs and deserves either from the U.S. Secretary of Labor or the Assistant Secretary of Labor for Employment and Training. Indeed, the Federal Apprenticeship Committee is totally ineffective as well. It is composed of persons representing the wrong interests, in light of its assignment. This is constantly reflected in the members' frustration. The Federal Apprenticeship Committee hasn't even met since June, 1982. It should be reorganized to include 25 members: five from management; five from labor, five from among the state labor commissioners; five from the state apprenticeship agency heads, and five from the public at large.

The federal Bureau of Apprenticeship and Training needs new and additional attention and support from the U.S. Congress. The Bureau should be separated completely from the administation of the Job Training Partnership Act (JTPA) and should be headed by an administrator of the rank of an Assistant Secretary of Labor. Although the National Apprenticeship Progam petitioned Assistant Secretary of Labor Albert Angrisani for a meeting with its officers at his convenience, every 90 days while he was in the position of Assistant Secretary of Labor for Employment and Training, Mr. Angrisani never found the time for accommodating the first meeting. He always said that he was too busy with CETA and JTPA matters.

A serious problem facing the Bureau of Apprenticeship and Training is its need for additional funding. Ironically, this need exists while the Employment and Training Administration (the organizational unit to which the Bureau is attached in the U.S. Department of Labor) is being administratively overwhelmed by the billions of dollars that it must administer under JTPA legislation, and in past years under CETA legislation. Although the Employment and Training Administration passes the bulk of its JTPA funding to to prime and balance-of-state sponsors (who in turn distribute project grants and stipends on to subcontractors and recipients), the sheer magnitude of administering this multibillion dollar[11] program has skewed all activity in the Employment and Training Administration toward the JTPA program. The

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[11] The following totals reflect the amount appropriated for the CETA and JTPA programs over a six-year period. The amount listed under fiscal year 1984 is a 21-month total, Oct. 1, 1983 through June 30, 1985, reflecting the beginning of a two-year, new-fiscal year grant cycle for JTPA.

Fiscal year:	*Appropriation*
1979	$10,295,365,000
1980	8,127,626,000
1981	7,525,831,000
1982	* 3,031,844,000
1983	4,006,702,000
1984	6,419,408,000

* This amount is low because $1,000,000,000 appropriated in fiscal year 1981 was carried forward into fiscal year 1982, reducing the need for additional appropriations

Bureau of Apprenticeship and Training, with its budget of $15 million dollars,[12] has been completely overshadowed in terms of priority and resources. If apprenticeship promotion is to expand, the Bureau of Apprenticeship and Training needs greater visibility and influence within the U.S. Department of Labor.

The Bureau's $15 million budget does not begin to accurately reflect the importance and magnitude of this program that is financed by $1 billion a year in private sector dollars, not federal dollars.

The actual cost of apprenticeship training in the United States is largely borne by private employers. For this reason it is difficult to determine how much money private industry is spending on apprenticeship, but the figure is estimated by some to be several times larger than the federal JTPA budget.[13] Since both JTPA and apprenticeship programs have training as their ultimate objective, isn't it more economical for the government to allocate more public funds to promote apprenticeship programs?

The congress should appropriate additional public money in support of formal apprenticeship in each of the next several years. Rather than for me to try to propose exactly how many dollars should be appropriated by the Congress for an expanded apprenticeship program in each of the next several years, I want to address problems surrounding the most effective use of those public resources already appropriated to the U.S. Bureau of Apprenticeship and Training.

The U.S. Bureau will have 256 authorized positions at the end of fiscal year 1984, down from approximately 495 authorized positions in 1978. The Bureau has recognized state-administered apprenticeship training programs in 32 states and territories (SAC states). Each of these programs is headed by a state-employed state director of apprenticeship and training who has the full authority and responsibility for directing all government apprenticeship programs in that respective jurisdiction. Most of these directors are furnished state staffs with which to operate state-administered apprenticeship programs as agents of the federal government. In these same states and territories the U.S. Bureau of Apprenticeship and Training also employs a "state director of apprenticeship and training," a secretary, and, in most cases, additional field staff that is charged with exactly the same responsibilities as are principally assigned to the state programs as lead agencies in their respective jurisdictions. These federally-furnished staff persons in these 32 states and territories are simply not needed, and there is no viable justification for the continued expenditure of federal funds for their employment.

What is needed includes the possible supplementation of the state staffs through the provision of federal grants (possibly requiring state matching monies) to the certified state and territorial apprenticeship programs; the development, production, and distribution of self-teaching audio-visual training materials to complement each recognized apprenticeable occupational craft; and the development, production, and verification of tests for the certification of skill attainment in the pursuit of competency based apprenticeship training. Support for the development of an expanded formal apprenticeship program throughout America requires the deliberate pursuit of job analyses and the manufacture of related-instruction materials for each apprenticeable craft in the next few years. This has been done for a small number of the 800 apprenticeable occupations thus far at a cost of approximately $2 million per craft. This need should be responded to by the U.S. Congress with major appropriations to the U.S. Bureau in each of the next several years until this job is completed.

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[12] Federal budget for Bureaus of Apprenticeship and Training for fiscal year 1981 was $15,737,000, for fiscal year 1982 was $15,737,000, for fiscal year is $15,369,000, and for fiscal year 1984 will be $14,856,000.

[13] "Expenditures for private vocational and technical school training in 1980 were an estimated $1.8 billion with some of this subsidized by public funds, particularly under the veterans' training programs, and much of it beyond the means of persons with limited earnings and income. The estimates of formal training and education financed by industry are not very dependable, but a best guess is that between $5 billion and $8.5 billion were spent in 1980, excluding the wage and salary costs for training during work hours." Taggart, p. 7.

"Many companies are investing large amounts on training and development of their employees. Some training budgets rival the R&D budgets of companies." Cameron.

Dr. Anthony Carnevale estimates that employers are investing more than $30 billion annually in formal employee training. Carnevale, p. 3. Also, White House Conference on Productivity, "Report of the Preparatory Conference on Private Sector Initiatives, Pittsburgh, Pa., August 2-4, 1983." [Washington: The White House, 1983], p. 57.

"Private enterprises are now spending between $10 and $15 billion a year on training costs, and if the costs of employees' salaries are included in these estimates they aggregate to $21 billion." White House Conference on Productivity, "Report of the Preparatory Conference on Human Resources, St. Louis, Mo., June 21-23, 1983." [Washington: The White House, 1983], p. 4.

An expanded federal apprenticeship program desperately needs to furnish the states with promotional materials—literature, supporting letters and T.V. spots for the apprenticeable crafts. A promotional campaign not unlike the campaign conducted by the armed forces is needed for recruiting young persons into apprenticeable occupations.

The existing resources of the Bureau should be redirected to these efforts immediately; however, I recognize that this will not happen unless the Congress directs that this be done. I recognize the interests of those U.S. Bureau staff members who reside in the various SAC states. Many of them are not interested in moving and many may not be qualified to pursue the alternative activities that I advocate for the U.S. Bureau of Apprenticeship and Training. What can be done immediately is for the Bureau to adopt a policy of not filling any vacancies arising in its staff within any of the SAC states and territories. There are now many vacancies. However, unfortunately, with the lifting of the federal freeze on hiring, the Bureau is moving quickly to fill these unneeded positions. This is sad.

I appeal to you for your assistance in redirecting the activities and resources of the U.S. Bureau of Apprenticeship and Training and in obtaining the resources that this vitally important program requires.

AN ADEQUATE NATIONAL APPRENTICESHIP PROGRAM

A comprehensive national apprenticeship training program should include: (1) a nationwide determination of all apprenticeable occupations; (2) the establishment of precise training standards for each apprenticeable occupation; (3) the provision of government-developed instruction materials, including competency-based training modules, for all apprenticeable occupations; (4) the provision of validated competency-determinable examinations for each skill; (5) certification of journeymen and related-instruction instructors; (6) the provision of employer and employee promotional materials; (7) financial and training assistance to state agencies that certify apprenticeship programs; (8) relieving apprenticeship agencies of the responsibility for enforcing Equal Employment Opportunity requirements; (9) tax incentives for employers to encourage them to develop apprenticeship programs; and (10) membership of apprenticeship management professionals on manpower-development advisory boards and planning commissions.

STATE APPRENTICESHIP PROGRAMS

In addition to reorganizing the federal apprenticeship program, there is an urgent need for the states to independently reassess their apprenticeship activities. In the long run every state would be better off by investing considerably more funds in its high-skill training programs. This is being necessitated by the growing number of dislocated and displaced workers, by the changing technology in the work place, and by the need to spend tax dollars allocated for vocational education more efficiently.

Apprenticeship has proven to be a good investment of the taxpayer's money. States generally realize a two-fold increase in tax revenue as paid by the skilled craftsman for each dollar the state spends on promoting his or her apprenticeship.

Most states need to increase their appropriations for apprenticeship training by a factor of ten. Notably, many states provide at least one home demonstration agent for each county while apprenticeship programs are staffed with only a few individuals statewide.[14] Consideration should be given to staffing every industrial county with at least one apprenticeship representative.

It is also important to point out that apprenticeship is a training system that is not limited exclusively to either a union or non-union environment alone. It is clear that it works effectively in any setting where there is an apprenticeable occupation and where there is a serious intention on the part of a program sponsor to train aprentices. In North Carolina, for example, there are 34 programs of the about 1,350 programs that are currently registered that have any form of union involvement, which amounts to about two and one-half percent of the total number of programs. On the other hand about ninty-seven and one-half percent of North Carolina's registered apprenticeship programs have no union involvement.

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[14] North Carolina has 550 county agricultureal agents located in its 100 counties. Of these 185 are home demonstration agents. These employees are funded 23 percent by local county governments, 35 percent by the Federal Government, and 42 percent by the State government.

NEW TEACHING TECHNOLOGY

Both the emergence of new science and technology with its accompanying new high-skill occupations and the development of new materials, machines, and processes relative to the older apprenticeable occupations necessitates the continuing development and refinement of the curricula used for training journeymen craftworkers.

Indeed, in an address before the North Carolina Job Training Coordinating Council October 18, 1983, at the Raleigh Hilton in Raleigh, North Carolina, Dr. Carl Dolce, Dean of the School of Education, North Carolina State University, University of North Carolina, pointed out that even " 'Basic Skills' include the development of attitudes, motivation, and discipline, as well as the ability to analyze, think critically, and comprehend."

Audio-visual technology and the arrival of multi-channel cable television open up new opportunities for the development and provision of more accessible, more efficient, more thorough, and less expensive quality training. Individualized instructional media such as programmed learning, educational television and the use of the home and business computer provides a whole new opportunity for arming our nation's work force with the skills that the workers need in order to enjoy employment and that the nation needs in order to be internationally competitive.

The provision of an entire library of audio-visual curriculum materials for all of the nation's apprenticeable occupations is estimated to cost between $1 and $5 billion dollars, depending upon who the contractors are and how well they are supervised. Some proprietory sponsors of apprenticeship have developed high quality full-curriculum materials at a cost of approximately $2,000,000 per curriuclum.

The International University Consortium for Telecommunications in Learning presents a model in liberal arts teaching technology for also establishing a similar consortium of business and government for telecommunications in the teaching of technology and skills.[13]

The corporate campus is a tremendously large and growing adult educational program. Corporate America is using teletraining, interactive video, programmed instruction, electronic libraries and corporate computers to train and educate its employees.

At our bank, we have a fully staffed and equipped video production studio which produces 70 training videotapes a year, to go along with the heavy classroom training we do."[14]

The nation must also begin to take seriously the challenge of providing continuing education to adult students, who often may be displaced workers. We must begin to understand what we can about the adult learner. We need to find our what motivates the adult learner. We need to discover the educational media that appeals to the adult learner, especially those who have not been in a formal educational setting for many years. We also need to inaugurate a program capable of transcripting the adult learners' successful completion of certified courses.

We need to try to discover newer educational instruction media such as teleconferencing, interactive educational technology, and others that appeal to the adult learner. New instructional technology provides the United States a great opportunity to improve and expand educational opportunities in a quality manner.

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[13] The International University Consortium for Telecommunications in Learning (Inc.) is a national project supported in part by the Carnegie Corporation of New York. It's address is the Center of Adult Education, Adelphi Road and University Boulevard, College Park, Maryland 20742 and P.O. Box 430, Owings Mills, Maryland 21117. The telephone number of the College Park address is (301) 454-6627 and the telephone number of the Owings Mills address is (301) 356-5600. The International University Consortium for Telecommunications in Learning now has one major program. The Consortium is committed to providing members of this program with a Bachelor's degree curriculum for adults who cannot, or choose not to, enroll in courses on campus, full time. IUC courses are in three areas of study: Technology in Management, Behavorial and Social Sciences, and Humanities. The Consortium develops its own courses and adapts British Open University courses. IUC currently has access to 140 Open University courses developed by eminent scholars and broadcasting experts at a cost of roughly $700 million.

The British Open University was chartered in 1969; by 1980 it was enrolling 90,000 students a year and had 50,000 graduates. The first IUC students were enrolled in September, 1980, in the seven institutions and affiliated broadcasting services selected to participate in the pilot year. IUC's course development processes, teaching method and many of its original materials were adapted from the highly acclaimed British Open University. In its second year, IUC operated in 11 states. In July, 1982, 17 institutions and 23 television stations and cable systems belonged to the Consortium.

[14] Cameron.

COMPETENCY-BASED APPRENTICESHIP

Traditionally, formal apprenticeship has been organized on a time basis with an apprentice typically spending four or five years working with a journeyman craftworker while taking 144 hours of related instruction each year. Completion of the time resulted in the ending of the apprenticeship and certification by the employer that the trainee had become a journeyman craft-worker. While this time-based approach has not always been successful and has left many employers discontented with the end result, new teaching technologies have opened the way to the provision of competency-based or proficiency-based apprenticeship training.

Competency-based apprenticeship allows an apprentice to advance at whatever rate is comfortable for that trainee while assuring that "completion" signifies a mastery of both theory and proficiency associated with the craft.

Competency-based or proficiency-based apprenticeship requires standardized tests to determine each apprentice's mastery of a required minimum level of proficiency necessary for becoming a journeyman. There is little justification for each state to design, produce, and validate these tests separately. Not only would the costs be prohibitive, but the validation part of the process requires larger numbers of tested apprentices than most states have for a given trade. In addition, there is a need for recognition and registration of qualified journeymen on a national basis. Indeed, one of the services that a national apprenticeship program should provide is a nationwide registration system for journeymen craftsmen. With today's computer technology, such a system could be easily developed.

National curriculum committees need to be established for each recognized craft. These committees should be charged with reviewing and recommending standards as well as for developing minimum curricula for each apprenticeship program. The establishment of a national institute for high-skill training would be invaluable for overseeing the design, development, and manufacture of quality related-training and testing materials. A proposal for such an institute to be established at the state level by North Carolina is attached as appendix E.

Such an institute could monitor new developments that impact upon high-skill crafts and it could accelerate the adoption of these developments into the craft training materials. The institute could also fill several important voids in this country's vocational education apparatus by (1) being a training center to train and upgrade the teachers who are needed for local-based vocational education; (2) assisting in the design of curricula and tests; (3) providing training in crafts where the scarcity of journeymen prohibits local training, and (4) initiating training and complementing curricula for newly identified crafts.

APPRENTICESHIP FINANCING

It is again important to note that the nation's apprenticeship program is an employer financed training system. While there is no proposal that this be significantly changed, it is suggested that government incentives be inaugurated that will encourage a much greater use of employers resources in behalf of formal apprenticeship training.

The role of governments in the apprenticeship program is circumscribed. The government's role is that of a catalyst/facilitator, promoter/organizer, minimum standards determinator/program certifier, and guarantor of availability and accessibility. The role of governments is not conceived to be that of a deliverer of training as program sponsors.

The appropriate role of governments, nevertheless, requires an adequate level of funding that has not been experienced in past years.

Financial resources are critical to the success of the apprenticeship system in the United States. For example, the states, such as Nortth Carolina, that operate a state apprenticeship council are on their own, financially. There is no subsidy from the federal government for the states acting to carry out the business of the federal government in apprenticeship. Moreover, even the most well-financed states suffer a significant underfinancing of their apprenticeship system. As a further example, it has been recommended that there be an increase in the size of the apprenticeship field staff in North Carolina by approximately 50 workers[17] in order to market and service apprenticeship at an appropriate level. The North Carolina General Assembly has been unable to find its way clear to give the financial support required for such a significant initiative. It is obvious that the federal government has the resources to fund the states to this level of staffing and could financially justify it on the basis of the present tax income generated by apprentices that are presently registered, with any additional apprentice-generated tax income being, essentially, a financial boon to the government.

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[17] North Carolina currently has a state-employed apprenticeship staff consisting of a director, an assistant director, six clerical, and 16 field representatives.

There is little doubt that training and remediation activities for persons of limited employability are profitable. According to the best available evidence, short-duration local classroom training raises earnings by a tenth in the year after termination, while training on-the-job yields increments almost twice as large. Comprehensive residential training for the most disadvantaged youths pays off in earnings gains of a tenth as well as large reductions in crime and dependency. Moreover, the impacts of local classroom and residential training pays off more than proportionately. Every dollar spent on residential training yields at least $1.45 in social benefits, according to conservative estimates of the current values of benefits and costs and after accounting for alternative real returns on the same resources. Local classroom training returns an estimated $1.38 for each dollar invested, while the payoff of on-the-job training is substantially greater. The investment in remediation and training is, thus, at least as profitable as the investment in higher education, and it is profitable despite labor market conditions which currently militate against training and despite correctable shortcomings in programs and policies.[16]

Equally important is the fact that apprenticeship training is a good business deal for government. According to a recent document prepared by the acting administrator of the United States Department of Labor (USDL) Bureau of Apprenticeship and Training, state and local government receives about $17.000 in taxes paid by apprentices for every dollar it spends in administering the apprenticeship system, while the apprentices are in training, not years later. From the standpoint of simple enlightened self interest, it is incredible that the United States has not made apprenticeship its number one priority for worker training. It is obviously the only recognized training system that is more than totally self-supporting while the training is taking place. It should also be pointed out that the acting administrator of the USDL Bureau of Apprenticeship and Training used an average apprenticeship wage of about $4.00 per hour in making his calculations, while in "poorly paid" North Carolina the average hourly wage of apprentices exceeds $6.000 per hour; thus, the return to government shown in the referenced administrator's report may be considered substantially understated on a national basis.

Oftentimes those formulating new legislation desinged to promote and support a new or expanded endeavor (such as increasing the supply of military hardware) realize that the supply of craftsmen in the American workforce required to achieve the desired goal is inadequate. Typically they propose some measure to promote high-skill training in the occupations necessary for the fulfillment of the stated objectives. The objectives, however, are seldom achieved because the drafters of the legislation overlook the fact that it is the state and territorial governments and not the federal Government that have the principal responsibility for promoting and registering apprenticeship programs. Legislators seldom allocate resources to state agencies to enable the agencies to expand their efforts to promote and register desired apprenticeship programs. Because state agencies are servicing all the recognized apprenticeship programs that their current resources will permit, efforts to expand the training of high-skill craftsmen will be futile unless additional resources are provided to the agencies. It should also be pointed out that most state governments are experiencing economic hard times because of the current recession. As a result, they are decreasing or, at best, leaving unaltered their appropriations to apprenticeship promotional, approval, and accrediting agencies. Even where appropriations are not cut, inflation continues to erode these agencies' rates of productivity in generating journeyman-level craftsmen.

It is often the practice of Congress, when drafting new legislation, to provide "set-aside" funds from those monies appropriated for the purpose of carrying out the provisions of an act in order to assure the proper funding of special emphases of a particular program. CETA and JTPA, for instance, provide for "set-asides" for the funding of the "Job Corps," but do not provide for any "set-asides" in behalf of apprenticeship. These acts, as well as Section 2306 of the Vocational Education Act and future legislation in support of maintaining a viable military industrial manufacturing capacity, should all provide for "set-asides" in behalf of formal apprenticeship.

Despite inadequate government promotion, apprenticeship training continues to be a viable process for producing journeyman-level craftsmen. The public, the employer, and the employee all benefit from apprenticeship. Such training is an economical approach to producing craftsmen because (1) private employers, using private machinery and resources, pay for the training and (2) the training process takes advantage of the proven ability of a recognized journeyman-level craftsman while simultaneously producing a marketable product. The sale of the end product usually offsets a large part of the training costs. Public educational institutions could not begin to duplicate most industry-run apprenticeship programs because of the prohibitive cost of materials and machinery.

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[16] Taggart, p. vii

Whenever the United States takes manpower development seriously, the future of the Nation's economy will brighten and the Nation will be enabled to deliver on its promise to her people of providing "life, liberty, and the pursuit of happiness".

APPENDIX A

THE FITZGERALD ACT, H.R. 7274

AN ACT to enable the Department of Labor to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices and to cooperate with the States in the promotion of such standards

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Labor is hereby authorized and directed to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices, to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, to cooperate with State agencies engaged in the formulation and promotion of standards of apprenticeship, and to cooperate with the National Youth Administration and with the Office of Education of the Department of the Interior in accordance with section 6 of the Act of February 23, 1917 (39 Stat. 932), as amended by Executive Order Numbered 6166, June 10, 1933, issued pursuant to an Act of June 30, 1932 (47 Stat. 414), as amended.

SEC. 2. The Secretary of Labor may publish information relating to existing and proposed labor standards of apprenticeship, and may appoint national advisory committees to serve without compensation. Such committees shall include representatives of employers, representatives of labor, educators, and officers of other executive departments, with the consent of the head of any such department.

SEC. 3. On and after the effective date of this Act the National Youth Administration shall be relieved of direct responsibility for the promotion of labor standards of apprenticeship as heretofore conducted through the division of apprentice training and shall transfer all records and papers relating to such activities to the custody of the Department of Labor. The Secretary of Labor is authorized to appoint such employees as he may from time to time find necessary for the administration of this Act, with regard to existing laws applicable to the appointment and compensation of employees of the United States: Provided, however, That he may appoint persons now employed in division of apprentice training of the National Youth Administration upon certification by the Civil Service Commission of their qualifications after nonassembled examinations.

SEC. 4. This Act shall take effect on July 1, 1937, or as soon thereafter as it shall be approved.

Passed the House of Representatives June 30, 1937.

APPENDIX B

JOINT MEMORANDUM TO THE CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE ON APPROPRIATIONS FOR THE DEPARTMENT OF LABOR, HOUSE OF REPRESENTATIVES

From: The Department of Labor and the Office of Education.

In re apprenticeship.

There seems to be some question in the minds of the committee members as to which phases of apprentice training relate to labor standards and which relate to education. It is clearly and officially recognized by the President, the United States Office of Education, the United States Department of Labor, the National Youth Administration, the American Federation of Labor, various national associations of employers, and State governments that there are two distinct groups of responsibilities and functions in the promotion and subsequent operation of plans for apprentice training. One group deals with the apprentice as an employed worker—the conditions under which he works, his hours of work, his rates of pay, the length of his learning period, and the ratio of apprentices to journeymen so that overcrowding or shortages of skilled workers in the trades may be avoided in large part. The second group of responsibilities deals with the apprentice as a student—the related technical and supplemental instruction needed to make him a proficient worker and the supervision and coordination of this instruction with his job experience.

The United States Office of Education and educators generally have not conceived it to be a part of their function in providing educational training for apprentices to give consideration to problems which relate to labor standards. Mr. Frank Cushman, Chief of the Trade and Industrial Education Service of the United States Office of Education, has stated, "We think there are two groups of responsibilities (in apprenticeship). One group has to do with labor standards, wages, hours, quotas, length of apprenticeship period, etc. The other group has to do with education and training of apprentices." Mr. Thomas Quigley, professor of industrial education at the Georgia School of Technology, and vice president of the American Vocational Association, said recently, "Certainly the vocational schools and their staffs do not wish to entangle themselves in the wages, working hours, and labor disputes involved in apprenticeship agreements any more than they do in other issues extraneous to the schools' one great job of training and coordinating such training."

There also seems to be a question in the minds of the committee members as to whether the two distinct phases of apprenticeship can be most effectively furthered nationally by a single administrative agency or by the two Government agencies which have jurisdiction, experience, and facilities in the respective fields. It has been amply demonstrated that the responsibilities in connection with the apprentice as an employed worker can best be carried on by the State labor department which is charged with the general responsibility of improving working conditions and fostering the well-being of the workers, and that the responsibilities in connection with the apprentice as a student can best be performed by the State board for vocational education. These State agencies in turn look to the United States Department of Labor and to the United States Office of Education for leadership and research and for the determination of national standards in their respective fields.

Except in a few States there has been no adequate machinery developed to promote uniformity and give adequate protection to employment standards of apprenticeship. Partly because of lack of interest in apprenticeship on the part of employers and partly because of this lack of machinery, this vital system of training for the highly skilled trades has not kept pace either with the needs of industry or with the opportunities for employment in the skilled trades. The United States Employment Service, as a consequence, warns that unless apprentices are put on now, within a very short period of time there will be a real shortage of skilled workers in many of our most important industries. Labor has repeatedly expressed itself in opposition to any apprenticeship program that does not provide proper safeguards for labor standards. If young workers are to be apprenticed to prevent this impending shortage, the trade-unions must be assured that the boys' interests will be safeguarded, that labor standards will be upheld, and that the apprentice will not be put on at the expense of the older worker. The agencies that can gain the cooperation of the trade-union movement with employers in the development of the labor standard phases of apprenticeship are the labor departments—Federal and State.

With funds for apprenticeship promotion on a national basis, the Department of Labor will be carrying out the purpose for which it was created, "to foster, promote, and develop the welfare of the wage earners of the United States, to improve their working conditions, and to advance their opportunities for profitable employment." It will in no way encroach upon the work now being done by the United States Office of Education, but, on the contrary, as evidenced by the activities of the Federal Committee on Apprentice Training during the past 2 years, will vitalize and greatly increase the demands upon the school authorities for preapprentice training, related instruction for apprentices, coordination of this instruction, with job experience, the preparation of trade analyses and outlines of instruction and for specially trained teachers to carry on these functions.

APPENDIX C

The North Carolina Department of Labor has assembled the following information in response to inquiries about occupations in which many of the new jobs will occur in North Carolina.

ANTICIPATED ANNUAL AVERAGE JOB OPENINGS FOR PRIORITY OCCUPATIONS RANKED BY HIGHEST ANNUAL AVERAGE JOB NEEDS 1983–90, NORTH CAROLINA STATEWIDE TOTALS

[Those occupations that are apprenticeable are indicated with the number of years of training generally required]

Occupational description	Apprenticeable		Annual job openings		
	Yes/No	Years training	Growth	Replacement	Total
Stenographers	No		7,063	3,920	10,983
Clerks, general office	No		4,445	2,910	7,355
Clerks, sales	No		1,766	3,081	4,847
Nurses aides, orderlies	Yes	1	2,271	1,334	3,605
Truck drivers	Yes	1	2,268	1,234	3,502
Cashiers	No		1,368	1,629	2,997
Assemblers	No		2,152	569	2,721
Waiters and waitresses	No		1,695	845	2,540
Nurses, licensed practical	Yes	1–2	1,369	1,006	2,375
Nurses, registered	No		1,376	897	2,273
Sewing machine operators	No		662	1,513	2,175
Food preparation and service workers, fast food restaurants	No		1,246	746	1,992
Maintenance repairers, general utility	Yes	2–4	1,354	550	1,904
Sales managers, retail trade and store	No		713	1,099	1,812
Mechanics, automotive	Yes	3–4	951	569	1,520
Stock clerks	No		879	640	1,519
Heavy equipment operators	Yes	2–4	839	661	1,500
Carpenters	Yes	4	607	845	1,452
Mechanics, heavy equipment	Yes	3–4	816	411	1,227
Police and detectives	Yes	1–3	920	233	1,153
Drafters	Yes	2	955	187	1,142
Keypunch (data entry) operators	No		608	318	926
Electrical, electronic technicians	Yes	2–4	722	166	888
Plumbers and/or pipefitters	Yes	4	439	397	836
Electricians	Yes	4	490	315	805
Welders and flamecutters	Yes	1–2	505	182	687
Machinists	Yes	4	459	185	644
Computer systems analysts	No		503	77	580
Computer programers	Yes	2	467	72	539
Painters, construction and/or maintenance	Yes	3	236	289	525
Precision machine operatives	Yes	1–4	373	125	498
Computer operators	Yes	1	418	73	491
Clinical lab technologist, technicians	Yes	1–3	320	135	455
Diesel mechanics	Yes	3–4	288	156	444
Cement masons	Yes	2–3	191	129	320
Designers	Yes	1–2	177	119	296
Mechanics, heating, air-conditioning, and refrigeration	Yes	2–4	166	91	257
Structural steel workers	Yes	3	138	63	201
Health record technologist, technicians	No		66	39	105
Totals			42,281	27,810	70,091

The above composite information has been assembled by the North Carolina Department of Labor from the best estimates provided by many sources and is not the product of a single survey or study

APPENDIX D

PROPOSAL FOR A FEDERAL PROGRAM TO ESTABLISH AND MAINTAIN ECONOMIC, CONSTRUCTION, AND LABOR STABILITY IN THE HOUSING INDUSTRY

(By John C. Brooks Commissioner of Labor, State of North Carolina; and Vice President, National Apprenticeship Program, Inc.)

The backlog in needed construction of housing for Americans has reached an alarming level. Even though the housing industry is now operating at only 43 percent of capacity, the point of inelasticity in production can be reached within six months time and looms as precursor of critical economic conditions for the nation in the near future. On this Labor Day one can not help but observe the disastrously high level of unemployment and note particularly the irony of unemployed hombuilders in the face of a national crisis with regard the need for significantly more housing for Americans.

The following proposal is made made mindful of the Nation's commitment to the free enterprise system and the integral part that free enterprise plays in our housing industry and market and the integral part, in turn, which the housing industry plays in our free enterprise system, as well as the part that government already plays in the housing industry and market. It is today recommended that the United States Government embark upon a federal housing program which has as its principal objectives the establishment and maintenance of stability in the housing industry. The purposes of pursuing such objectives are to assure the availability of housing to meet the nation's needs at affordable prices reflecting "protected" values, to aid the reestablishment of economic stability generally, and to train a labor force capable of and employed continuously building a minimum of 2,000,000 units of housing for Americans annually, without in any way impairing our free enterprise system.

The United States has a history of establishing and supporting commodity stabilization programs. This is a proper role of government. This proposal does not suggest that government take over the responsiblity for providing Americans the housing that they need. It does advocate, however, that the government foster economic stability, foster stability in the labor market, and assure the ability of the nation to provide a minimum number of additional housing units each year.

The United States is generating a need for additional housing units at an annual rate of 2,300,000 or more. As recently as four years ago the journeymen-level craftsmen in the eighteen building trades and their helpers had the capacity to construct 2,300,000 untis of housing each year. Beyond that number the housing industry is currently inelastic. Today the housing industry is producing at the rate of approximately 1,000,000 units annually. There are many craftsmen and helpers unemployed. Many of these former employees have left the industry. Many will never make themselves available to this industry again because of their frustration with the cyclical, and seasonal employment/unemployment which it has provided them. How many of these craftsmen will be unavailable in the future remains to be determined.

It takes four or five years to train journeymen electicians, plumbers, carpenters, sheet metal workers, etc. Relatively few are in training today. A critical shortage of these craftsmen is imminent.

As interest rates recede, many of the 7,500,000 family units who desire housing, but who have restrained their demand for housing during the past decade because they felt that they could not afford it in the current financial market place, will conclude that the time has arrived to seek their long-desired units of housing. This may result even though a fall in interest rates is not commensurately reflected in a fall in the costs of home mortgages just out of the realization by millions of would-be home buyers that the availability of more desirable and acceptable home mortgages is not in the offing. As these home buyers enter the housing market, demand will rise from the current level of 1,000,000 units per year. Demand can and will rise to the level of 2,300,000 units annually in a short span of time—possibly within six months as compared to the four years required to train journeymen-level builders. Demand, because of the pent-up backlog, will significantly exceed 2,300,000 units annually.

When this happens, those unemployed building craftworkers and their helpers who are willing to, will rejoin the home construction industry. Nevertheless, demand potentially will exceed supply within a year's time. (The total unmet demand for 1983 will approximate 9,800,000 units of housing.) The result will be significant increases in the costs, and value, of housing.

This means that conditions in the housing industry and the housing market will most likely lead the next, and successive rounds of inflation. As inflation ballons to tweny and twenty-five percent annual levels, the federal government most likely will again take the steps to deflate the economy, leading to successive periods of recession. Interest rates will most assuredly zoom back up. And much-needed housing will become even more out-of-reach for the average American family.

The answer? A significant part of the answer must be the expansion of the housing industry to enable it to meet demand as that demand shoots by the industry's current maximum level of ability to supply 2,300,000 units, or less, of housing annually. Such an expansion requires the training of craftsmen who are not now in training.

How does a society get people interested in learning a trade and committed to pursuing the required four-year curriculum when half of the relevant industry is closed down? This is clearly a dilemma and national challenge which the housing industry can not meet by itself either today, or at any time in the near future.

This is where the people of America join in through their corporate representation in the United States Government. The nation should establish a federal housing program designed to contract with private builders for the construction of such number of housing units annually which represents the difference between the number of housing units that private enterprise is constructing on its own initiative and 2,000,000 units. Observing that the median price of a house in America in 1981 was $72,400.00, the government should probably contract to have built townhouse and condominium-type housing with a retail value of approximately $50,000–$60,000, although the kind of housing might reasonably vary in different locales. Reflecting national policy objectives to foster land conservation, minimize fuel consumption, and promote urban revitalization, these housing units should probably be near-downtown, multi-family developments.

This housing should not be placed on the market for sale at this point, but should be rented or leased. Whenever the private housing market exceeds 2,000,000 units annually, the United States Government should discontinue its construction program and proceed to place such number of housing units on the market for sale as represents the publicly declared excess of demand for housing over 2,000,000 units annually. The number of federally-owned housing units offered for sale should be increased in accordance with a schedule reflecting total demand in excess of 2,000,000 units annually until they have either been exhausted or the number of housing units being built by the private sector on its own initiative again drops below 2,000,000 units annually.

This sell-off program, perhaps needless to say, will not augment the supply of housing when demand exceeds the level of 2,000,000 units annually since it can not be counted twice depending upon whether it is rental or for-sale property, but the sell-off program would be a feature designed to reduce the government's investment in housing at such time as that purpose could best be pursued without impacting in an undesirable way upon the construction of housing units by private builders on their own initiative. Moreover, the sell-off program would be an added feature designed to reduce the inflationary impact resulting from housing demand significantly exceeding supply on future occasions. In other words, the governmentally-initiated built housing might be rented at a loss, while this loss might be recovered when units are later sold at market prices reflecting inflated value due to scarcity.

An accomplishment of this program would be that it would protect jobs for the highly skilled artisans who are already in the building trades, and whose skills are needed both to construct the housing that Americans need and to train the highly skilled building craftamen for tomorrow. Most of the journeymen in the building trades are the product of on-the-job training formal apprenticeship programs. These training programs must continue in recessionary periods as well as periods of prosperity if the nation is ever to be prepared for prosperity, but currently they are not keeping pace.

A feature of this federal housing program should be the establishment of a required formal apprenticeship training program inclusive of all construction projects that are a part of the program. This would provide a source of journeymen to the private sector in periods when the economy is recovering and expanding.

Even now it is likely that the implementation of this proposed federal housing program would be too late to forestall the next cycle of inflation caused by the conditions that have been described above; however, implementation in the near future would hopefully and reasonably impact favorably upon the next cycle and help to forestall successive cycles thereafter.

APPENDIX E

MEMORANDUM

To: Members of the North Carolina Board of Science and Technology.
From: John C. Brooks.
Date: November 4, 1983.
Re establishment of Center for Applied Technology and Skills.

The draft of the proposed final report of the Governor's Task Force on Science and Technology addresses recommendations to the State's needs for technical training and employee retraining to each of Chapters II, III, and IV. These recommendations, while helpful, do not actually cover adequately the needs which are sought to be addressed. In keeping with the theme of the report, "New Challenges for a New Era: Progress Through Innovation, Education and Research in North Carolina," I should like to convey a recommendation for the Board's consideration for inclusion in its final report which might pull together helpfully these recommendations on technical training and retraining into a more comprehensive proposal with a more specific focus.

There are some 24,000 occupations which are defined by the U.S. Department of Labor and which are pursued in our society. Of these, 800 are considered to be high-skill, non-professional. These are the skills whose masters are termed "journeymen." The predominant current existing educational mechanism in North Carolina for training persons in these 800 crafts is through formal apprenticeship training provided by private employers through on-the-job training. Most of the training provided through this mechanism is neither duplicated nor complemented through any institutional curricula or related training. The training for most of these crafts is now of four to five years duration.

When one reviews the spectrum of educational institutions provided by the State of North Carolina, one finds a gap in the educational structure with regard to the existence of any instituion which is charged with generating and offering curricula in these particular skills.

The two-year community college system predominantly offers liberal arts curricula with a few high-skill related courses which are in themselves insufficient to train journeymen-level craftpersons. These institutions have neither the faculty, laboratory facilities, nor libraries adequate to train journeymen-level craftpeople. The provision of an adequate faculty would require faculty salaries from 50 to 100 percent higher than the maximum currently authorized within the community college system. This is partly due to the fact that journeymen-level craftpeople in North Carolina are currently averaging approximately $27,000 annual income and are nationally averaging almost $37,000 annual income in the private sector. The provision of adequate libraries and laboratories for hands-on training would require the expenditure of significantly more monies by the State and local governments than any current appropriations which are being contemplated would conceivably supply.

The university system generally picks up technical curricula in the professional occupations; however, the system does provide some curricula offerings which would complement needed curricula in some of the apprenticable occupations. The apprenticeable occupations are characterized by both a high level of understanding of theory and mathematics, and the development of proficiency in manual manipulation. A list of these apprenticeable occupations is attached in an appendix.

Set forth below is a proposal for the establishment of a Center for Applied Technology and Skills in Raleigh, North Carolina.

LOCATION OF FACILITY

It has been determined that the State no longer needs as many centralized psychiatric hospitals as it now has. As a result of this determination, there is under way a project to phase out Dorothea Dix Hospital as such a facility. It is herewith proposed that the Dorothea Dix campus, with its two thousand acres and dormitory space, be converted into a residential Center for Applied Technology and Skills. The conversion of the physical facilities into a Center for Applied Technology and Skills could be achieved within a short period of time, would save the State millions of dollars in capital expenditures for such a facility, and would be a very practical conversion of the existing facilities. The proximity of this institution to North Carolina State University would highly facilitate attracting competent faculty members, permit the avoidance of duplication of basic educational courses which such a center would otherwise require, and provide access to a major library which would reduce some of the needs of duplication which the establishment of a comprehensive research library for the new center otherwise would require.

MEETING THE NEED FOR QUALITY FACULTY

The kind of Center for Applied Technology and Skills which is needed in North Carolina requires a highly skilled faculty capable of conducting research, designing curricula, developing and validating tests; and capable of teaching graduate students. To have an effective institution requires a "critical mass" of competent faculty members. It is not enough, even if it were possible, to have a single competent faculty person at a random community college who might undertake to design curricula and tests and conduct research in a given apprenticeable occupation. Over and beyond the problem of an inadequate faculty salary schedule to attract such a person, such a faculty member would not normally be attracted by the professional status and professional support system furnished under such conditions. The establishment of a Center for Applied Technology and Skills would offer faculty members the required professional status and support system needed to attract the quality of faculty members such an institution would need to have to be successful.

The faculty salary schedule established for this kind of facility could take into consideration both the added responsibilities and higher mission of the facility and thus accommodate the need to have competitive salaries sufficient to attract the needed faculty. This would mean that the faculty salary schedule would be considerably higher than that which is presently available to the community college system.

An additional mission of this facility would be to train the faculty which our community college system is in need of to accommodate the provision of as much of the curricula for teaching applied technology and skills as might be usefully and appropriately distributed to and implanted in the various institutions within the community college system. Such a facility or institution might also design and administer a certification system for such teachers.

MEETING THE NEED FOR CURRICULA

There is currently no institution in North Carolina where curricula for courses in applied technologies and skills are developed and updated. To begin with, there is not currently a faculty in place in North Carolina capable of designing the curricula which is needed in these areas. The level of expertise and ability which this requirement demands will have to be assembled if the job is to be done. One of the benefits of establishing a Center for applied Technology and Skills is the assemblage of a faculty capable of developing the curricula which are needed in North Carolina for training persons with the marketable skills demanded in the work place. The curricula which are designed at this center may be disbursed for use in the high schools for use at the junior and senior levels, in the community colleges, and in public and private institutions of higher education; as well as at the center itself.

MEETING THE NEED FOR WELL-EQUIPPED LABORATORIES

The four to five years of training which is normally required to produce journeymen-level craftworkers necessitates the students developing manual proficiency through hands-on experience with the tools and resources of their trade. This requirement can be met in one of two ways on a practical basis: (1) through the utilization of the equipment and resources of private industries in the normal production of the products of business, and (2) through the provision of facsimile facilities in laboratories of an educational institution. While the first alternative is most economical and in many instances will be the only practical approach due to the exorbitant expense of the type of equipment and resources required to develop manual proficiency, the provision of laboratory facsimile training facilities will be desirable in many situations to accommodate large numbers of students, to facilitate research, and to provide training opportunities where a complete training facility is not available in a single business in North Carolina. The kinds of laboratories that the teaching of applied technology and skills required are very, very expensive to establish. It can cost in thousands to millions of dollars to equip a single laboratory for the teaching of a single craft. It is not reasonable to contemplate that the community college system of North Carolina will have the resources from either the State or local sources sufficient to equip adequate laboratories for the teaching of very many high technology and skill curricula. Currently, the community college system of 58 institutions has only a handful of schools which offer well-equipped laboratory facilities for the teaching of more than four crafts.

While the State as a whole may need 50-100 high-skill craftpersons a year trained in a given craft, the need, when distributed throughout the State, often does not justify the establishment of a well-equipped laboratory at a single existing community college. The assemblage of a sufficient number of students to make the offering of a curriculum and the provision of a well-equipped laboratory efficient and economical suggests that in many instances a residential institution is necessary in order that the students wishing to pursue the training can assemble in a central location where a well-equipped laboratory can be provided.

MEETING THE NEED FOR TEST DEVELOPMENT AND VALIDATION

The teaching of applied technologies and skills requires the ability to certify the students' achievements and proficiencies upon completion of individual modules of training. There is currently unavailable adequate tests for determining this certification. One of the roles of this particular center would be the development of tests and their validation.

MEETING THE NEEDS OF STUDENTS

In many instances this Center for Applied Technology and Skills would offer curricula which is otherwise unavailable in North Carolina. An example of such a curriculum would be one to train elevator mechanics.

In cases where a curriculum has been implanted into the community college system, students pursuing the third and fourth year level of the program could transfer to the center where the advance levels of training are available and where a faculty is assembled capable of teaching these levels of the curriculum. A faculty capable of teaching these advanced levels of such curricula can not be found in the community college system today.

This center would also be a facility for training new faculty members both for the center and other institutions which might teach components of the curricula which the center generates. It also would have the capability of guiding the work of graduate students in vocational education.

MEETING THE NEEDS OF THE EXISTING WORK FORCE

Many of the persons who are in need of training opportunities in North Carolina are already members of the work force and are already employed. One of the functions of the center, and a very important one, would be the designing of training programs which can be implanted in existing businesses for the utilization of workers who are on the job. These programs would permit workers to retrain for the new technologies which are introduced in the industries in which they are already working.

MEETING THE NEED FOR RELATED-INSTRUCTION MATERIAL

While there is some high quality related-instruction material already in existence for some of the 800 high-skill occupations, most of this material has been produced by proprietary interests which either restrict access to the use of the material or sell its usage per student at an unreasonably high price. There needs to be at least one facility in North Carolina with the audio-visual production capacity to produce related-instruction materials which can be packaged and distributed to the high schools and community colleges for use in the classroom as well as for use in learning labs wherever they may exist. This function of a center of this kind could be the one which has the greatest impact upon opening opportunities for training in many occupations to women, blacks, and others to whom opportunity is now denied. The equipping of an adequate production center for related-instruction materials would require both expensive equipment and high-priced editors and production personnel that can only be efficiently located in a single facility in the State of North Carolina. Adequate related-instruction materials are generally unavailable in North Carolina today. The lack of a capacity for production of this kind of material is impeding the provision of more curricula in the apprenticeable occupations today.

MEETING THE NEED FOR RESEARCH

There is a tremendous need not only in North Carolina, but in all of America, for the conduct of significant research in the teaching of vocational education. The conduct of creditable research requires a good faculty, well-equipped laboratories, a good library, grants, and a supply of research fellows. The conduct of research is not one of the contemplated activities of the community college system. Research with regard to the teaching of applied technologies and skills in apprenticeable occupations is not currently being conducted to any significant degree in the University of North Carolina. The kind of center that is contemplated in this proposal would support the conduct of significant research in these areas of vocational education. A faculty of substance could be assembled that is of sufficient size to support the worthwhile activities of research fellows who might be attracted to this facility.

MEETING THE NEED FOR LIBRARY SUPPORT

A specialized library of materials is necessary if the kind of curricula development and research set forth above is to be conducted in the State of North Carolina. There is currently no assemblage of materials anywhere in North Carolina adequate for this need. In fact, there are few library assemblages of materials of this kind anywhere in America today. The best library of this kind of material of which I'm aware is a 60,000-volume collection at Ohio State University. While that particular collection is available for use at the location in which it is situated, it is not a lending library. The second best library of this kind of material may be at the University of Texas.

No one institution within the community college system nor the central community college administrative offices themselves have adequate resources, or are likely ever to have adequate resources, with which to assemble a library sufficient to support curricula development and research in the apprenticeable occupations. If the State is serious about providing training opportunities in these crafts, a library will have to be assembled to accommodate this need.

MEETING THE NEED FOR PUBLICATIONS

A professional cadre of teachers and training directors in North Carolina's high schools, colleges, community colleges, and private industry in the fields represented by the apprenticeable occupations needs the support and information which can be provided through publications and journals addressing their particular fields and interests. Such publications and opportunities for publication do not currently exist in North Carolina. Those persons in these areas of vocational education are without the supply of information and support which is needed to keep them abreast of new developments and which are needed to develop a high level of professional competence in these fields. It would be practical to establish a location for the generation of such a publication or journal at the proposed Center for Applied Technology and Skills.

MEETING THE NEED FOR GRANT DEVELOPMENT

There are many opportunities for the development of grant proposals for submission to federal government agencies and private industry which would inure to the benefit of research and development of curricula, curricula materials, and the establishment of demonstration projects in promotion of furthering the provision of quality training opportunities in the apprenticeable occupations. Most of these opportunities for the submission of grant proposals are not pursued in North Carolina because there is no one with the time and resources to write the grant proposals and to pursue the procedures required for obtaining and administering such grants. Millions of dollars in grants could successfully be procured for furthering the work contemplated for the proposed center were a staff assembled with the skills needed for this activity. Given the assignment and resources to pursue grants, the public would be amazed at the amount of funds that could be generated through this activity. A case in point is the recent offering of grants to the states in the Appalachian Region by the Appalachian Regional Commission for innovative programs in the provision of skill-training in the Appalachian Region.

MEETING THE NEED FOR ESTABLISHING EMPLOYMENT POLICY PLANNING

While an effort is currently underway through a labor market information task force to develop a mechanism for the State of North Carolina state government to begin to collect and forecast labor market information, as a member of the task force, I can report that it is unlikely that any significant inroads will be made upon collecting an adequate amount of labor market information sufficient to be the basis for any useful forecasting activity in the near future. Ultimately, the development of labor market information and forecasting on a useful basis toward the end of developing an employment policy and planning the effective use of the State's resources for training North Carolina's work force in needed occupations will have to evolve upon an assemblage of persons who are not currently on the State's payroll. This function may very well be one that can more logically be performed by the assemblage of persons contemplated through the establishment of the proposed Center for Applied Technology and Skills. This function would complement the research which this kind of center would be conducting anyway.

MEETING THE NEED FOR A BROKERAGE AGENCY

There is a role that needs to be played by some institution in the State of North Carolina that is not currently being played by anyone. This role is a combination of being a catalyst and a broker in working out cooperative arrangements between government, public and private educational institutions, and private businesses in the provision of vocational education training opportunities. The administrative office of the community college system does not and cannot effectively play this role because of its jurisdictional limitations. Vocational training curricula need to be designed which are then implanted, in some instances in high schools, in some instances in community colleges, in some instances in private colleges, in some instances in branches of the University, and in many instances in individual businesses. Additional complementing components or modules of a given curriculum which interface with those which are implanted in these situations need then to be provided in other institutions. The distribution of these programs in geographical areas of the State is yet another dimension of the brokerage activity which should reflect the determinations of labor market forecasting and student/employee training needs and requirements. There needs to be a central facility with the ability to comprehend the entire provision of occupational education opportunity in the State of North Carolina. The proposed Center for Applied Technology and Skills could accommodate this need.

CONCLUSION

The establishment of the proposed Center for Applied Technology and Skills would assemble the resources necessary for effectively and efficiently providing the much needed services in support of the provision of adequate vocational education in North Carolina. The establishment of this center would fill a very significant void in the educational structure of the State. This center would have the resources and the "critical mass" necessary to be successful. This center would not be in competition with the current community college structure of this State, but would complete this existing system in very important needed ways and would, in fact, strengthen our community college system significantly.

Enclosure.

DEPARTMENT OF LABOR

Office of the Secretary

29 CFR Part 29

Labor Standards for the Registration of Apprenticeship Programs; List of Occupations Meeting the Criteria for Apprenticeability

AGENCY: Department of Labor.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: Title 29, CFR, § 29.4 (Criteria for Apprenticeable Occupations) sets forth the characteristics that denote an apprenticeable occupation. The Bureau of Apprenticeship and Training (BAT) has reviewed all occupations now considered apprenticeable by BAT or by one or more of the State and territorial apprenticeship agencies using the characteristics set forth in § 29.4. Appendix A is an initial listing of those occupations that appear to possess all of the required characteristics. Additional occupations now approved by BAT and/or one or more state or territorial apprenticeship agencies remain under review and will be published by list at a later date.

DATES: Comments must be received on or before May 12, 1980.

ADDRESSES: Send comments, communications, and inquiries to Paul H. Vandiver, Director, Office of National Industry Promotion, Employment and Training Administration, U.S. Department of Labor, Bureau of Apprenticeship and Training, Washington, D.C. 20213. Comments shall be in writing and submitted in duplicate.

FOR FURTHER INFORMATION CONTACT: Paul H. Vandiver (202) 376-6214.

SUPPLEMENTARY INFORMATION: On February 18, 1977, the Department of Labor published in the Federal Register (42 FR 10138) registration standards for apprenticeship programs. These standards, in the form of the addition of a new Part 29 to 29 CFR Subtitle A, were promulgated pursuant to the authority of section 1 of the National Apprenticeship Act of 1937 (29 U.S.C. 50), Reorganization Plan No. 14 of 1950 (64 Stat. 1267; 3 CFR 1949–53 Comp., p. 1007), the Copeland Act (40 U.S.C. 276c), and 5 U.S.C. 301.

Part 29 sets forth labor standards, policies, and procedures relating to the registration, cancellation, and deregistration of apprenticeship programs and agreements by the Bureau of Apprenticeship and Training (BAT), the recognition of a State Apprenticeship Council or agency (SAC) as the appropriate agency for registering local apprenticeship programs for certain Federal purposes, the derecognition of a SAC, and the criteria for apprenticeable occupations.

It has been the policy of BAT over the past 42 years to rely upon the comments and recommendations of private industry, labor and management organizations, and governmental agencies in determining the apprenticeability of occupations. In addition to the procedures followed by BAT, each State or territorial apprenticeship agency has the prerogative of declaring an occupation to be apprenticeable. This has resulted in substantial variancies from State to State in the interpretation of the various criteria and in applying the criteria for apprenticeability.

Appendix A is published herein for comment prior to final publication as the first step in the development of a nationally recognized listing of apprenticeable occupations. Additional listings will be published from time to time as other occupations are reviewed and analyzed in accordance with the criteria established by § 29.4. All such additional listings will be published for comment prior to final publication.

Therefore, it is proposed to amend Title 29, CFR, Part 29, by adding Appendix A, which would read as follows:

Appendix A.—List of Occupations Meeting the Criteria for Apprenticeability

Occupations	Dictionary of occupational titles (DOT) code No.
Accordion Maker (musical inst.)	730.281-010
Acoustical Carpenter (constr.)	860.381-010
Air-Conditioning Installer-Servicer, Window Unit (any indus.)	637.261-010
Air-Conditioning Mechanic (auto. serv.) (Automotive Specialty Shops only)	620.281-010
Aircraft-Armament Mechanic (gov. serv.)	632.261-010
Aircraft Lay-Out Worker (aircraft-aerospace mfg.)	809.381-010
Aircraft Mechanic, Armament (aircraft-aerospace mfg.)	806.261-010
Aircraft Mechanic, Electrical and Radio (aircraft-aerospace mfg.)	825.381-010
Aircraft Mechanic, Plumbing and Hydraulics (aircraft-aerospace mfg.)	862.381-010
Aircraft-Photographic-Equipment Mechanic (photo. app.)	714.281-010
Airframe-and-Power-Plant Mechanic (aircraft-aerospace mfg.; air trans.)	621.281-014
Airplane Coverer (aircraft-aerospace mfg.; air trans.)	849.381-010
Airplane Woodworker (aircraft-aerospace mfg.)	769.281-010
Alarm Operator (gov. serv.)	379.162-010
Animal Trainer (amuse. & rec.)	159.224-010
Artificial-Glass-Eye Maker (optical goods)	713.261-010
Artificial-Plastic-Eye Maker (optical goods)	713.261-014
Asphalt-Paving-Machine Operator (constr.)	853.663-010
Assembler (jewelry)	700.684-014
Assembler, Aircraft, Power Plant (aircraft-aerospace mfg.)	806.381-022
Assembler, Aircraft, Structures and Surfaces (aircraft-aerospace mfg.)	806.381-026
Assembler, Electro-Mechanical (aircraft-aerospace mfg.)	806.381-030
Assembler-Installer, General (aircraft-aerospace mfg.)	806.361-014
Assembly Mechanic, Experimental Aircraft (aircraft-aerospace mfg.)	806.381-038
Assembly Technician (office machines)	633.261-010
Audio Operator (radio & tv broad.)	194.262-010
Audio-Video Repairer (any indus.)	729.281-010
Auger Press Operator, Manual Control (brick & tile)	575.462-010
Automated Equipment Engineer-Technician (mach. mfg.)	638.261-010
Automatic-Equipment Technician (tel. & tel.)	822.281-010
Automobile-Body Repairer (auto. serv.)	807.381-010
Automobile Mechanic (auto. serv.)	620.261-010
Automobile-Radiator Mechanic (auto. serv.) (Automotive Specialty Shops only)	620.381-010
Automobile-Repair-Service Estimator (auto. serv.)	620.261-018
Automobile Tester (auto. serv.)	620.261-014
Automobile Upholsterer (auto. serv.)	780.381-010
Automotive Cooling System Diagnostic Technician (auto. serv.) (Automotive Specialty Shops only)	620.261-560
Automotive-Generator-and-Starter Repairer (auto. serv.)	721.281-010
Automotive Maintenance Equipment Servicer (any indus.)	620.281-018
Avionics Technician (aircraft-aerospace mfg.; air trans.)	823.281-010
Baker (bake. prod.)	526.381-010
Baker (hotel & rest.)	313.381-010
Baker, Pizza (hotel & rest.)	313.381-014
Bakery-Machine Mechanic (bake. prod.)	629.281-010
Bank-Note Designer (gov. serv.)	142.081-010
Barber (pers. serv.)	330.371-010
Batch-and-Furnace Operator (glass mfg.)	572.382-010
Battery Repairer (any indus.)	727.381-014
Beekeeper (agric.)	413.161-010
Bench Hand (jewelry)	735.381-010
Ben-Day Artist (print. & pub.)	970.681-010
Biomedical Equipment Technician (inst. & app.; med. serv.)	719.261-010
Blacksmith (forging)	610.381-010
Blocker-and-Cutter, Contact Lens (optical goods)	716.681-010
Boatbuilder, Wood (ship & boat bldg. & rep.)	860.381-018
Boilerhouse Mechanic (any indus.)	805.361-010
Boilermaker Fitter (boilermaker)	805.361-014
Boilermaker I (boilermaking)	805.261-014
Boilermaker II (boilermaking)	805.381-010
Boiler Operator (any indus.)	950.382-010
Bookbinder (print. & pub.)	977.381-010
Bootmaker, Hand (rubber goods)	753.381-010

Authority: Sec. 1, 50 Stat. 664, as amended (29 U.S.C. 50; 40 U.S.C. 276c; 5 U.S.C. 301); Reorganization Plan No 14 of 1950, 64 Stat. 1267 (5 U.S.C. App., p. 534).

Appendix A.—List of Occupations Meeting the Criteria for Apprenticeability—Continued

Occupations	Dictionary of occupational titles (DOT) code No.
Bracelet and Brooch Maker (jewelry)	700.381-010
Brake Repairer (auto. serv.)	620.281-026
Bricklayer (brick & tile)	861.381-014
Bricklayer (const.)	861.381-018
Bricklayer, Firebrick and Refractory Tile (const.)	861.381-026
Brilliandeer-Lopper (jewelry)	770.281-010
Butcher, All Round (slaughter & meat packing)	525.381-014
Butcher, Meat (hotel & rest.)	316.681-010
Buttermaker (dairy prod.)	529.362-010
Cabinetmaker (woodworking)	660.280-010
Cable Installer-Repairer (light, heat & power)	821.361-010
Cable Splicer (const.; light, heat, power; tel. & tel.)	829.361-010
Cable Tester (tel. & tel.)	822.361-010
Calibration Laboratory Technician (aircraft-aerospace mfg.; electronics)	019.281-010
Camera Repairer (photographic app.)	714.281-014
Canal-Equipment Mechanic (waterworks)	899.261-010
Candy Maker (confec.)	529.361-014
Canvas Worker (canvas goods; ship & boat bldg. & rep.)	739.381-010
Car Repairer (loco. & car bldg. & rep.)	622.381-014
Carburetor Mechanic (auto. serv.)	620.281-034
Card Cutter, Jacquard (narrow fabric; textile)	683.582-010
Card Grinder (asbestos prod.; textile)	680.380-010
Carpenter (const.)	860.381-022
Carpenter, Maintenance (any indus.)	860.281-010
Carpenter, Mold (brick & tile; conc. prod.)	860.381-034
Carpenter, Rough (const.)	860.381-042
Carpenter, Ship (water trans.)	860.281-014
Carpet Cutter (ret. tr.)	929.381-010
Carpet Layer (ret. tr.)	864.381-010
Carver, Hand (furn.; plan. mill)	761.281-010
Cash-Register Servicer (any indus.)	633.281-010
Casing-in-Line Setter (print. & pub.)	653.360-010
Casket Assembler (mort. goods)	739.481-010
Caster (jewelry)	502.381-010
Caster (nonfer. metal alloys)	502.482-010
Cell Maker (chem.)	844.681-010
Cement Mason (const.)	844.364-010
Central-Office Installer (tel. & tel.)	822.381-014
Central-Office Repairer (tel. & tel.)	822.281-014
Chaser (jewelry; silverware)	704.381-010
Cheesemaker (dairy prod.)	529.361-018
Chemical-Engineering Technician (profess. & kind.)	008.261-010
Chemical Laboratory Technician (profess. & kind.)	022.261-010
Chemical Operator III (chem.)	558.382-018
Chief of Party (profess. & kind.)	018.167-010
Chief Operator (chem.)	558.260-010
Civil Engineer (profess. & kind.)	005.061-014
Clarifying-Plant Operator (textile)	955.362-010
Cloth Designer (profess. & kind.)	142.081-014
Coin-Machine-Service Repairer (coin mach.)	639.281-014
Colorist, Photography (photofinish.)	970.381-010
Commercial Designer (profess. & kind.)	141.081-014
Complaint Inspector (light, heat, & power)	959.361-010
Composing-Room Machinist (print. & pub.)	627.261-010
Compositor (print. & pub.)	973.381-010
Computer-Peripheral-Equipment Operator (clerical)	213.382-010
Construction-Equipment Mechanic (const.)	620.261-022
Contour Wire Specialist, Denture (medical serv.)	712.381-014
Conveyor-Maintenance Mechanic (any indus.)	630.381-010
Cook (any indus.)	315.361-010
Cook (hotel & rest.)	313.361-014
Cook, Pastry (hotel & rest.)	313.381-026
Coppersmith (ship & boat bldg. & rep.)	862.281-010
Coremaker (foundry)	518.381-014
Cork Insulator, Refrigeration Plant (const.)	863.381-010
Corrosion-Control Fitter (light, heat & power; pipe lines)	820.361-010
Cosmetologist (pers. serv.)	332.271-010
Custom Tailor (garment; pers. serv.; ret. tr.)	785.261-014
Cutter, Fabrics and Materials (aircraft-aerospace mfg.)	781.384-010
Cylinder Grinder (print. & pub.)	500.381-010
Cylinder-Press Operator (print. & pub.)	651.362-010
Dairy Equipment Repairer (dairy prod.)	629.281-018
Decorator (any indus.)	298.381-010
Decorator (glass mfg.; glass prod.)	740.381-010
Dental Assistant (medical serv.)	079.371-010
Dental Ceramist (medical serv.)	712.381-010
Dental-Equipment Installer-Servicer (whole. tr.)	829.361-014
Dental Laboratory Technician (medical serv.)	712.381-018
Design Drafter, Electromechanisms (profess. & kind.)	017.261-014
Designer and Patternmaker (boot & shoe)	788.281-010
Detailer (profess. & kind.)	017.261-018
Diamond Selector (jewelry)	770.281-010
Dictating-Transcribing-Machine Servicer (any indus.)	633.261-014
Die Designer (mach. shop)	007.161-010
Die Finisher (mach. shop)	601.381-010
Die Maker (jewelry)	601.381-014
Die Maker (paper goods)	739.381-018
Die Maker, Bench Stamping (mach. shop)	601.281-010
Die Maker, Stamping (mach. shop)	601.280-010
Die Maker, Trim (mach. shop)	601.280-014
Die Maker, Wire Drawing (mach. shop)	601.280-018
Die Polisher ([illegible])	601.381-018
Diesel-Engine Tester (engine & turbine)	625.261-010
Diesel Mechanic (any indus.)	625.281-010
Die Setter (forging)	612.360-010
Die Sinker (mach. shop)	601.280-022
Dietetic Intern (profess. & kind.)	077.107-010
Director, Funeral (pers. serv.)	187.167-030
Display Designer (profess. & kind.)	142.051-010
Displayer, Merchandise (ret. tr.)	298.081-010
Door-Closer Mechanic (any indus.)	630.381-014
Drafter, Architectural (profess. & kind.)	001.261-010
Drafter, Automotive Design (auto. mfg.)	017.261-022
Drafter, Automotive Design Lay-Out (auto. mfg.)	017.281-026
Drafter, Cartographic (profess. & kind.)	018.261-010
Drafter, Civil (profess. & kind.)	005.281-010
Drafter, Commercial (profess. & kind.)	017.261-026
Drafter, Detail (profess. & kind.)	017.261-030
Drafter, Electrical (profess. & kind.)	003.281-010
Drafter, Electronic (profess. & kind.)	003.281-014
Drafter, Heating and Ventilating (profess. & kind.)	017.261-034
Drafter, Landscape (profess. & kind.)	001.261-014
Drafter, Marine (profess. & kind.)	014.281-010
Drafter, Mechanical (profess. & kind.)	007.281-010
Drafter, Plumbing (profess. & kind.)	017.261-038
Drafter, Structural (profess. & kind.)	005.281-014
Drafter, Tool Design (profess. & kind.)	007.261-022
Drafter, Topographical (profess. & kind.)	018.261-014
Dragline Operator (any indus.)	850.683-018
Dredge Operator (const.; mining & quarrying)	850.663-010
Dressmaker (any indus.)	785.361-010
Drilling-Machine Operator (mining & quarrying)	930.482-010
Dry Cleaner (clean., dye & press.)	362.382-014
Dry-Wall Applicator (const.; mfd. bldgs.)	842.681-010
Editor, Film (motion pic.; radio & tv broad.)	962.264-010
Electrical-Appliance Repairer (any indus.)	723.381-010
Electrical-Appliance Servicer (any indus.)	827.261-010
Electrical-Instrument Repairer (any indus.)	729.281-026
Electrical Repairer (any indus.)	829.281-014
Electrical Technician (profess. & kind.)	003.161-010
Electric-Distribution Checker (const.; light, heat, & power)	824.281-014
Electrician (any indus.)	824.261-010
Electrician (ship & boat bldg. & rep.)	825.381-030
Electrician (water trans.)	825.281-014
Electrician, Airplane (aircraft-aerospace mfg.)	825.281-018
Electrician, Automotive (auto. serv.)	825.281-022
Electrician, Locomotive (loco. & car bldg. & rep.)	825.281-026
Electrician, Powerhouse (light, heat, & power)	820.261-014
Electrician, Radio (any indus.)	823.281-014
Electrician, Substation (light, heat, & power)	820.261-018
Electric-Meter Installer I (light, heat, & power)	821.361-014
Electric-Meter Repairer (light, heat, & power)	729.281-014
Electric-Meter Tester (light, heat, & power)	821.381-010
Electric-Motor-and-Generator Assembler (elec. equip.)	820.361-014
Electric-Motor Assembler and Tester (any indus.)	721.281-014
Electric-Motor Repairer (any indus.)	721.281-018
Electric-Tool Repairer (any indus.)	729.281-022
Electric-Track-Switch Maintainer (rr. trans.)	825.261-010
Electromechanical Technician (inst. app.)	710.281-018
Electromedical-Equipment Repairer (any indus.)	729.281-030
Electronic-Organ Technician (any indus.)	828.261-010
Electronic-Production-Line-Maintenance Mechanic (electronics)	629.261-022
Electronic Sales-and-Service Technician (profess. & kind.)	828.251-010
Electronics Mechanic (any indus.)	828.281-010
Electronics Technician (profess. & kind.)	003.161-014
Electronics Tester I (electronics)	726.261-014
Electronics Utility Worker (electronics)	726.361-010
Electrotyper (print. & pub.)	974.381-010
Elevating-Grader Operator (const.)	850.663-014
Elevator Constructor (const.)	825.361-010
Elevator Repairer (any indus.)	825.281-030
Embalmer (pers. serv.)	338.371-014
Embosser (print. & pub.)	659.382-010
Emergency Medical Technician (medical serv.)	079.374-010
Emergency Medical Technician, Ambulance (medical serv.)	355.374-010
Engineering Assistant, Mechanical Equipment (profess. & kind.)	007.161-018
Engineering Model Maker (inst. & app.)	600.260-010
Engine-Lathe Set-Up Operator (mach. shop)	604.380-018
Engine-Lathe Set-Up Operator, Tool (mach. shop)	604.280-010
Engine Repairer, Service (engine & turbine)	625.281-018
Engine Turner (jewelry)	704.381-018
Engraver (glass prod.; mirror)	775.381-010
Engraver I (print. & pub.)	979.381-010
Engraver, Block (print. & pub.)	979.281-014
Engraver, Hand, Hard Metals (engraving)	704.381-026
Engraver, Hand, Soft Metals (engraving)	704.381-030
Engraver, Machine (print. & pub.)	979.382-014
Engraver, Pantographic I (engraving)	704.382-010
Engraver, Picture (print. & pub.)	979.281-018
Engraving-Press Operator (print. & pub.)	651.382-010
Envelope-Folding-Machine Adjuster (paper goods)	641.680-010
Environmental-Control System Installer-Servicer (Residential & Light Commercial) (any indus.)	637.261-014
Equipment Installer (tel. & tel.)	822.381-010
Estimator and Drafter (light, heat, & power)	019.261-014
Etcher, Hand (print. & pub.)	971.261-010
Etcher, Photoengraving (print. & pub.)	971.381-014
Experimental Assembler (any indus.)	739.381-026
Experimental Mechanic (motor & bicycles)	600.260-014
Extruder Operator (fabric.; plastics prod.; plastics mat.)	557.382-010
Fabricator-Assembler, Metal Products (any indus.)	809.381-010
Farm Equipment Mechanic I (agric. equip.)	624.281-010
Farm Equipment Mechanic II (agric. equip.)	624.381-014
Farmer, General (agric.)	421.161-010
Fastener Technologist (nut & bolt)	612.260-684
Field Engineer (radio & tv broad.)	193.262-018
Film Developer (motion pic.; photofinish.)	976.382-018
Film Laboratory Technician I (motion pic.)	976.381-010
Finisher, Denture (medical serv.)	712.681-018
Fire-Control Mechanic (gov. serv.)	632.261-014
Fire Fighter (any indus.)	373.364-010
Fire Fighter, Crash, Fire and Rescue (air trans.)	373.663-010
Fire Medic (medical serv.)	373.364-010
Firer, Kiln (pottery & porc.)	573.662-010
Fitter (mach. shop)	801.381-014
Fitter I (any indus.)	801.261-014
Fixture Maker (light fix.)	600.380-010
Floor-Covering Layer (loco. & car bldg. & rep.)	622.381-026
Floor Layer (const.; ret. tr.)	864.481-010
Floral designer (ret. tr.)	142.081-010
Folding-Machine Operator (print & pub.)	653.382-010
Folding-Machine Setter (print. & pub.)	653.360-014
Forge-Shop-Machine Repairer (forging)	626.261-010
Forging-Press Operator I (forging)	611.482-010
Form Builder (aircraft-aerospace mfg.)	693.280-010
Form Builder (const.)	860.381-046
Former, Hand (any indus.)	619.361-010
Forming-Machine Operator (glass mfg.)	575.382-014
Foundry Metallurgist (foundry)	011.061-010
Fourdrinier-Machine Tender (build. board; paper & pulp)	539.362-014
Four-Slide-Machine Setter (any indus.)	616.360-018
Freezer Operator (dairy prod.)	529.482-010
Fretted-Instrument Repairer (any indus.)	730.281-026
Front-End Mechanic (auto. serv.)	620.281-038
Fuel-Injection Servicer (any indus.)	625.281-022
Fur Cutter (fur goods)	783.381-010
Fur Designer (fur goods)	142.081-014
Fur Finisher (fur goods)	783.381-014
Furnace Installer (light, heat, & power)	862.361-010
Furnace Installer and Repairer, Hot Air (any indus.)	869.281-010

Appendix A.—List of Occupations Meeting the Criteria for Apprenticeability—Continued

Occupations	Dictionary of occupational titles (DOT) code No.
Furnace Operator (found., iron & steel)	512.362-018
Furniture Designer (furn.)	142.081-022
Furniture Finisher (woodworking)	763.381-010
Furniture Upholsterer (any indus.)	780.381-018
Furrier (fur goods)	783.261-010
Gager (petrol. prod., petrol. refin., pipe lines)	914.384-010
Gang Sawyer, Stone (stonework)	670.362-010
Gas-Appliance Servicer (any indus.)	637.261-018
Gas-Engine Repairer (any indus.)	625.281-026
Gas-Main Fitter (light, heat, & power)	862.361-014
Gas-Meter Mechanic I (light, heat, & power)	710.381-022
Gas-Regulator Repairer (light, heat, & power; petrol. refin.; pipelines)	710.381-026
Gear-Cutting-Machine Set-Up Operator (mach. shop)	602.380-010
Gear-Cutting-Machine Set-Up Operator, Tool (mach. shop)	602.260-010
Gear Hobber, Set-Up Operator (mach. shop)	602.382-010
Gem Cutter (jewelry)	770.281-014
General Manager, Farm (agric.; whole. tr.)	180.167-018
Geodetic Computer (profess. & kind.)	018.167-014
Glass Bender (signs)	772.381-010
Glass Blower (glass mfg.)	772.681-010
Glass Blower, Laboratory Apparatus (glass prod.; inst. & app.)	772.281-010
Glass-Blowing-Lathe Operator (glass prod.)	772.482-010
Glazier (const.)	865.381-010
Glazier, Stained Glass (glass prod.)	779.381-010
Graphic Designer (profess. & kind.)	141.061-018
Grinder I (clock & watch)	603.482-030
Grinder Operator, Tool (mach. shop)	603.280-018
Grinder Set-Up Operator, Universal (mach. shop)	603.260-030
Gunsmith (any indus.)	632.281-010
Harness Maker (leather prod.; ret. tr.)	783.381-018
Harpsichord Maker (musical inst.)	730.281-034
Hat-Block Maker (woodworking)	661.381-010
Heat-Transfer Technician (profess. & kind.)	007.181-010
Heat Treater I (heat treat.)	504.382-014
Heavy Forger (forging)	612.361-010
Horseshoer (agric.)	418.381-010
Horticulturist (profess. & kind.)	040.061-038
Hydraulic-Press Servicer (ammunition)	626.381-018
Hydroelectric-Machinery Mechanic (light, heat, & power)	631.261-010
Hydroelectric-Station Operator (light, heat, & power)	952.362-018
Hydrometer Calibrator (inst. & app.)	710.381-030
Illustrator (profess. & kind.)	141.061-022
Industrial Engineering technician (profess. & kind.)	012.267-010
Injection-Molding-Machine Operator (fabric. plastics prod.)	556.382-014
Inspector, Mechanical and Electrical (inst. & app.)	710.381-038
Inspector, Quality Assurance (gov. serv.)	168.287-014
Instrumentation Technician (profess. & kind.)	003.261-010
Instrument Maker (any indus.)	600.280-010
Instrument Maker and Repairer (petrol. prod.)	600.280-014
Instrument Mechanic (any indus.)	710.281-026
Instrument Mechanic, Weapons System (inst. & app.)	711.281-014
Instrument Repairer (any indus.)	710.261-010
Instrument technician (light, heat, & power)	710.281-030
Insulation Worker (const.)	863.364-014
Interior Designer (profess. & kind.)	142.051-014
Jacquard-Loom Weaver (textile)	683.062-010
Jacquard-Plate Maker (knit goods)	685.381-010
Jeweler (jewelry)	700.281-010
Jig Builder (wood. box)	761.381-014
Job Printer (print. & pub.)	973.381-018
Job Setter (fabric. plastics prod.; mach. mfg.; mach. shop)	600.380-014
Joiner (ship & boat bldg. & rep.)	860.381-050
Kick Press Setter (button)	617.360-010
Kiln Operator (woodworking)	563.382-010
Knitter mechanic (knit goods)	685.360-010
Knitting Machine Fixer (hosiery; knit goods)	689.260-014
Laboratory Assistant (light, heat, & power)	029.361-018
Laboratory Technician (auto. mfg.)	019.381-010
Laboratory Tester (any indus.)	029.261-010
Landscape Gardener (agric.)	408.161-010
Land Surveyor (profess. & kind.)	018.167-018
Last-Model Maker (lasts & rel. forms)	761.381-018
Lather (const.)	842.361-010
Laundry-Machine Mechanic (laund.)	629.281-010
Lay-Out Technician (optical goods)	716.381-014
Lay-Out Worker I (any indus.)	600.281-018
Lead Burner (welding)	819.281-010
Leather-Stamper (leather prod.)	781.381-018
Legal Secretary (clerical)	201.362-010
Letterer (profess. & kind.)	970.661-014
Light Technician (motion pic.; radio & tv broad.)	962.362-014
Line Erector (const.; light, heat, & power)	821.361-018
Line Installer-Repairer (tel. & tel.)	822.361-014
Line Maintainer (any indus.)	821.261-014
Liner (pottery & porc.)	740.681-010
Line Repairer (light, heat, & power)	821.361-026
Linotype Operator (print. & pub.)	650.582-010
Lithographic Plate Maker (print. & pub.)	972.381-010
Lithographic-Press Operator, Tinware (tinware)	651.382-014
Livestock Rancher (agric.)	410.161-018
Locksmith (any indus.)	709.281-010
Locomotive Engineer (r.r. trans.)	910.363-014
Loft Worker (ship & boat bldg. & rep.)	661.281-010
Logging-Equipment Mechanic (logging)	620.281-042
Loom Fixer (asbestos prod.; narrow fab.; textile)	683.260-018
Machine Assembler (mach. mfg.)	638.361-010
Machine Builder (mach. mfg.; mach. tool & access.)	600.281-022
Machine Fixer (carpet & rug)	628.281-010
Machine Fixer (textile)	689.260-010
Machine Operator I (any indus.)	616.380-018
Machine Repairer, Maintenance (any indus.)	626.261-010
Machinery Erector (engine & turbine; mach. mfg.)	638.261-014
Machine Setter (any indus.)	616.360-022
Machine Setter (clock & watch)	600.360-022
Machine Setter (woodworking)	669.280-010
Machine Set-Up Operator (elec. equip.; firearms; mach. shop)	600.380-018
Machine Set-Up Operator, Paper Goods (paper goods)	649.380-010
Machine Try-Out Setter (mach. tool & access.)	600.360-010
Machinist (mach. shop)	600.280-022
Machinist, Automotive (auto. serv.)	600.280-034
Machinist, Experimental (mach. shop)	600.260-038
Machinist, Linotype (print. & pub.)	627.261-022
Machinist, Marine Engine (ship & boat bldg. & rep.)	623.281-026
Machinist, Motion-Picture Equipment (motion pic.; photo. app.)	714.281-018
Machinist, Outside (ship & boat bldg. & rep.)	623.281-030
Machinist, Wood (woodworking)	669.380-014
Maintenance Machinist (any indus.)	600.280-042
Maintenance Mechanic (any indus.)	638.281-014
Maintenance Mechanic (const.; petrol. prod.; pipe lines)	620.281-046
Maintenance Mechanic (grain & feed mill)	629.281-030
Maintenance Mechanic, Compressed-Gas Plant (comp. & liquefied gases)	630.281-010
Maintenance Mechanic, Telephone (any indus.)	822.281-018
Maintenance Repairer, Building (any indus.)	899.381-010
Maintenance Repairer, Factory or Mill (any indus.)	899.261-014
Manufacturer's Representative (whole. tr.)	279.157-010
Marble Setter (const.)	861.381-030
Material Coordinator (clerical)	221.167-014
Mechanic, Aircraft Accessories (aircraft-aerospace mfg.)	621.281-014
Mechanical-Engineering Technician (profess. & kind.)	007.161-026
Mechanical-Unit Repairer (auto. serv.; loco. & car bldg. & rep.)	620.381-018
Mechanic, Endless Track Vehicle (auto. serv.)	620.381-014
Mechanic, Field and Service (aircraft-aerospace mfg.)	621.281-026
Mechanic, Industrial Truck (any indus.)	620.281-050
Medical-Apparatus Model Maker (inst. & app.)	712.281-010
Medical Laboratory Technician (medical serv.)	078.381-014
Medical Secretary (medical serv.)	201.362-014
Metal Fabricator (any indus.)	619.361-014
Meteorological Equipment Repairer (any indus.)	823.281-018
Meteorologist (profess. & kind.)	025.062-010
Meter Repairer (any indus.)	710.281-034
Miller, Wet Process (corn prod.)	521.662-010
Milling-Machine Set-Up Operator I (mach. shop)	605.280-010
Millwright (any indus.)	638.281-018
Mine-Car Repairer (mining & quarrying)	622.381-030
Miner I (mining & quarrying)	939.281-010
Mock-Up Builder (aircraft-aerospace mfg.)	693.361-014
Model and Mold Maker (brick & tile)	777.281-014
Model and Mold Maker, Plaster (plast. prod.)	777.281-018
Model Builder (furn.)	709.381-014
Model Maker (aircraft-aerospace mfg.)	693.381-010
Model Maker (clock & watch)	693.380-010
Model Maker (jewelry)	709.381-018
Model Maker (pottery & porc.)	777.261-014
Model Maker, Firearms (firearms)	600.260-018
Model Maker, Wood (any indus.)	661.380-010
Molder (foundry)	518.361-010
Molder, Pattern (foundry)	693.381-022
Mold Maker (pottery & porc.)	777.681-010
Mold Maker I (jewelry)	700.381-034
Mold Maker II (jewelry)	777.381-022
Mold Maker, Die Casting & Plastic Molding (mach. shop)	601.280-030
Mold Setter (fabric. plastics prod.; phonograph)	556.380-010
Monotype-Keyboard Operator (print. & pub.; type founding)	650.582-014
Monument Setter (const.)	861.361-014
Mosaic Worker (glass prod.; dec. & art goods)	779.381-014
Motorboat Mechanic (engine & turbine; ship & boat bldg. & rep.)	623.281-038
Motorcycle Repairer (auto. serv.)	620.281-054
Motor-Grader Operator (const.)	850.663-022
Multi-Operation-Forming Machine Setter (any indus.)	616.260-014
Multi-Operation-Machine Operator (any indus.)	612.462-010
Neon-Sign Servicer (signs)	824.281-018
Numerical-Control-Machine Operator (mach. shop)	609.662-010
Office-Machine Servicer (any indus.)	633.281-018
Offset-Plate Maker (print. & pub.)	971.381-018
Offset-Press Operator I (print. & pub.)	651.482-010
Oil-Burner-Servicer and Installer (any indus.)	862.281-018
Oil-Field Equipment Mechanic (petrol. prod.)	629.381-014
Optical-Instrument Assembler (optical goods)	711.381-010
Optician (optical goods)	716.280-008
Optician (optical goods; ret. tr.)	716.280-014
Optician, Dispensing I (ret. tr.)	713.361-014
Optician, Dispensing II (ret. tr.)	299.474-010
Optomechanical Technician (optical goods; photo. app.)	007.161-030
Ordnance Artificer (gov. serv.)	632.261-018
Ornamental-Iron Worker (const.)	809.381-022
Ornamental-Metal Worker (fabric. metal prod., not elsewhere classified)	619.260-030
Orthodontic Technician (medical serv.)	712.381-030
Orthopedic-Boot-and Shoe Designer and Maker (boot & shoe; pers. protec. medical dev.)	788.261-010
Orthotics Technician (pers. protec., medical dev.)	712.381-034
Orthotist (pers. protec., medical dev.)	078.261-018
Outboard-Motor Mechanic (engine & turbine)	623.281-042
Outside Production Inspector (aircraft-aerospace mfg.)	806.261-046
Overhauler (textile)	628.261-010
Painter (const.)	840.381-010
Painter, Hand (any indus.)	970.381-022
Painter, Shipyard (ship & boat bldg. & rep.)	840.381-018
Painter, Sign (any indus.)	970.381-026
Painter, Transportation Equipment (aircraft-aerospace mfg.; air trans.; auto serv.)	845.381-014
Pantograph-Machine Set-Up Operator (mach. shop)	605.382-022
Paperhanger (const.)	841.381-010
Paste-Up Copy-Camera Operator (print. & pub.)	979.381-018
Patternmaker (furn.; garment; tex. prod., not elsewhere classified)	781.381-026
Patternmaker (spring)	693.281-014
Patternmaker (stonework)	763.381-010
Patternmaker, Metal (foundry)	600.280-050
Patternmaker, Metal, Bench (foundry)	693.281-018
Patternmaker, Plaster (aircraft-aerospace mfg.)	777.381-030
Patternmaker, Plastics (fabric. plastics prod.)	754.381-014
Patternmaker, Wood (foundry)	661.281-022
Photocomposing-Perforator-Machine Operator (print. & pub.)	203.582-042
Photoengraver (print. & pub.)	971.381-022

Appendix A.—List of Occupations Meeting the Criteria for Apprenticeability—Continued

Occupations	Dictionary of occupational titles (DOT) code No.
Photoengraver, Finisher (print. & pub.)	971.381-030
Photoengraving Printer (print. & pub.)	971.381-034
Photoengraving Proofer (print. & pub.)	971.381-038
Photogrammetrist (profess. & kind.)	018.261-026
Photographer, Lithographic (print. & pub.)	972.382-014
Photographer, Motion Picture (profess. & kind.)	143.062-022
Photographer, Photoengraving (electronics; print. & pub.)	971.382-014
Photographer, Still (profess. & kind.)	143.062-030
Photographic Equipment Maintenance Technician (photo. appa.)	714.281-026
Photographic Equipment Technician (photo. appa.)	714.281-022
Photographic-Plate Maker (electronics)	714.381-018
Photograph Retoucher (photofinish.)	970.281-018
Physical Therapist (medical serv.)	076.121-014
Piano Technician (any indus.)	730.281-038
Piano Tuner (any indus.)	730.361-010
Pinsetter Adjuster, Automatic (sports equip.)	638.261-022
Pipe Coverer and Insulator (ship & boat bldg. & rep.)	863.381-014
Pipefitter (const.)	862.281-022
Pipefitter (ship & boat bldg. & rep.)	862.261-010
Pipe Organ Builder (musical inst.)	730.281-042
Pipe Organ Tuner and Repairer (any indus.)	730.381-014
Plant Operator, Furnace Process (chem.; carbon, lampblack)	559.362-026
Plasterer (const.)	842.361-018
Plaster-Pattern Caster (aircraft-aerospace mfg.; mach. tools & access.)	777.381-038
Plastic-Fixture Builder (mach. shop)	601.381-030
Plastics Bench Mechanic (aircraft-aerospace mfg.; fabric. plastics prod.)	754.381-018
Plastic Tool Maker (mach. shop)	601.381-026
Plate Finisher (print. & pub.)	659.360-010
Platen-Press Operator (print. & pub.)	651.362-018
Plater (electroplating)	500.380-010
Plumber (const.)	862.381-030
Pneumatic Tester and Mechanic (aircraft-aerospace mfg.)	621.381-022
Pneumatic-Tool Repairer (any indus.)	630.281-010
Pneumatic-Tube Repairer (any indus.)	630.281-014
Podiatric Assistant (medical serv.)	079.374-018
Pottery-Machine Operator (pottery & porc.)	774.382-010
Powerhouse Mechanic (light, heat, & power)	631.261-014
Power-Plant Operator (light, heat, & power)	952.382-018
Power-Saw Mechanic (any indus.)	625.281-030
Power-Transformer Repairer (light, heat, & power)	821.361-034
Precision Assembler (aircraft-aerospace mfg.; electronics)	806.381-014
Precision Assembler, Bench (aircraft-aerospace mfg.)	706.681-010
Precision Lens Grinder (optical goods)	716.382-018
Press Maintainer (print. & pub.)	627.261-010
Press Operator, Heavy Duty (any indus.)	617.260-010
Printer, Plastic (coated fabric; fabric. plastics prod.)	651.382-030
Printer-Slotter Operator (paper goods)	659.662-010
Private-Branch Exchange Installer (tel. & tel.)	822.381-018
Private-Branch Exchange Repairer (tel. & tel.)	822.281-022
Process Artist (print. & pub.)	972.281-010
Production Engineer (profess. & kind.)	012.167-046
Programer, Business (profess. & kind.)	020.162-014
Programer, Engineering and Scientific (profess. & kind.)	020.167-022
Projection Printer (photofinish.)	976.381-018
Proof-Press Operator (print. & pub.)	651.582-010
Proofsheet Corrector (print. & pub.)	973.381-030
Prop Maker (amuse. & rec.; motion pic.)	962.281-010
Propulsion-Motor-and-Generator Repairer (elec. serv.)	721.281-026
Prospecting Driller (petrol. prod.)	930.382-018
Prosthetics Technician (pers. protec. & medical dev.)	712.381-038
Prosthetist (pers. protec. & medical dev.)	078.261-022
Protective Signal Installer (bus. serv.)	822.361-018
Protective Signal Repairer (bus. serv.)	822.361-022
Pump Erector (const.)	637.261-010
Pumper-Gager (chem.; petrol. refin.; pipe lines)	914.382-014
Pump Servicer (any indus.)	630.281-018
Purification Operator (chem.)	551.382-010
Quality Control Inspector (cut. & tools)	701.261-010
Quality Control Technician (profess. & kind.)	012.261-014
Radiographer (any indus.)	199.361-010
Radiologic Technologist (medical serv.)	078.362-026
Radio Mechanic (any indus.)	823.261-018
Radio Repairer (any indus.)	720.281-010
Radio Station Operator (aircraft-aerospace mfg.)	193.262-030
Recording Engineer (phonograph; radio & tv broad.)	194.362-010
Recovery Operator (paper & pulp)	552.362-018
Recreational Vehicle Mechanic (trans. equip.)	620.281-057
Refrigeration Mechanic (any indus.)	637.261-026
Refrigeration Unit Repairer (refrig. equip.)	637.381-014
Relay Technician (light, heat, & power)	821.261-018
Relay Tester (light, heat, & power)	729.381-026
Repairer, Hand Tools (cut. & tools)	701.381-010
Repairer, Heavy (auto. mfg.)	620.381-022
Repairer I (chem.)	630.281-018
Repairer, Welding Equipment (welding)	626.381-022
Reproduction Technician (any indus.)	976.361-010
Research Mechanic (aircraft-aerospace mfg.)	002.261-010
Reticle Inspector (electronics; inst. & app.; optical goods)	719.381-018
Retoucher, Photoengraving (print. & pub.)	970.381-030
Rigger (any indus.)	921.260-010
Rigger (ship & boat bldg. & rep.)	806.261-014
Rocket-Engine-Component Mechanic (aircraft-aerospace mfg.)	621.281-030
Rocket-Engine Mechanic (aircraft-aerospace mfg.)	806.261-026
Roller Engraver, Hand (print. & pub.)	979.681-018
Roll Threader Operator (nut & bolt)	619.482-010
Roofer (const.)	866.381-010
Rotogravure-Press Operator (print. & pub.)	651.362-026
Rubberizing Mechanic (any indus.)	630.281-030
Rubber Stamp Maker (pen & pencil)	733.381-014
Rubber Tester (rubber goods; rubber tire & tube)	559.381-014
Rug Cleaner, Hand (clean., dye., & press.)	369.384-014
Saddle Maker (leather prod.)	783.381-026
Safe-and-Vault Service Mechanic (bus. serv.; whole. tr.)	869.381-022
Salesperson, Parts (ret. tr.; whole. tr.)	279.357-062
Sample-Body Builder (auto. mfg.)	693.380-014
Sample Maker, Appliances (elec. equip.)	600.280-054
Sample Stitcher (garment)	785.361-018
Sandblaster, Stone (stonework)	673.382-010
Saw Filer (any indus.)	701.381-014
Saw Maker (cut. & tools)	601.381-034
Scale Mechanic (any indus.)	633.381-026
Screw-Machine Operator, Multiple Spindle (mach. shop)	604.382-010
Screw-Machine Operator, Single Spindle (mach. shop)	604.382-014
Screw-Machine Set-Up Operator, Production (mach. shop)	604.380-022
Screw-Machine Set-Up Operator, Single Spindle (mach. shop)	604.280-018
Service Mechanic (auto. mfg.)	807.381-022
Sewing-Machine Repairer (any indus.)	639.281-018
Sheet-Metal Worker (any indus.)	804.281-010
Shipfitter (ship & boat bldg. & rep.)	806.381-046
Shipwright (ship & boat bldg. & rep.)	860.381-058
Shoemaker, Custom (boot & shoe)	788.381-014
Shoe Repairer (pers. serv.)	365.361-014
Shop Tailor (garment; ret. tr.)	785.361-022
Siderographer (print. & pub.)	979.381-030
Signal Maintainer (r.r. trans.)	822.281-026
Sign Erector I (signs)	869.381-026
Sign Writer, Hand (any indus.)	970.281-022
Silk-Screen Cutter (any indus.)	979.681-022
Silversmith (silverware)	700.281-022
Sketch Maker I (print. & pub.)	979.381-034
Sketch Maker II (print. & pub.)	972.381-018
Skin Fitter (aircraft-aerospace mfg.; air trans.)	806.381-054
Small Engine Mechanic (any indus.)	625.281-034
Soft-Tile Setter (const.; ret. tr.)	861.381-034
Solderer (jewelry)	700.381-050
Sound Mixer (motion pic.; phonograph; radio & tv broad.)	194.262-010
Sound Technician (any indus.)	829.281-022
Spinner, Hand (any indus.)	619.362-018
Spring Coiling Machine Setter (spring)	616.260-018
Spring Maker (spring)	616.360-018
Spring-Manufacturing Set-Up Technician (clock & watch)	616.260-014
Spring Repairer, Hand (auto. serv.)	619.380-018
Stained Glass Artist (profess. & kind.)	142.061-054
Stationary Engineer (any indus.)	950.382-026
Station Installer-and-Repairer (tel. & tel.)	822.261-022
Steam Service Inspector (light, heat, & power)	862.361-022
Steel-Die Printer (print. & pub.)	651.382-030
Stencil Cutter (boat & car bldg. & rep.)	979.281-026
Stereotyper (print. & pub.)	974.382-014
Stoker-Erector-and-Servicer (any indus.)	637.281-014
Stone Carver (stonework)	771.281-014
Stonecutter, Hand (stonework)	771.381-014
Stone-Lathe Operator (stonework)	674.662-010
Stonemason (const.)	861.381-038
Stone Polisher, Machine (stonework)	673.382-018
Stone Setter (jewelry; optical goods)	700.381-054
Street-Light Servicer (light, heat, & power)	824.381-010
Stripper (print. & pub.)	971.381-050
Structural-Steel Worker (const.)	801.361-014
Substation Operator (light, heat, & power)	952.362-026
Supercargo (water trans.)	248.167-010
Surface-Plate Finisher (stonework)	775.381-018
Switchboard Operator (light, heat, & power)	952.362-034
Tank Setter (petrol. prod.)	801.361-022
Tap-and-Die Maker Technician (clock & watch)	601.280-054
Tape-Recorder Repairer (any indus.)	720.281-014
Taxidermist (profess. & kind.)	199.261-010
Technician, Submarine Cable Equipment (tel. & tel.)	822.261-054
Television-and-Radio Repairer (any indus.)	720.281-018
Television-Cable Installer (any indus.)	821.281-010
Template Maker (any indus.)	601.381-038
Template Maker, Extrusion Die (mach. shop)	601.280-032
Terrazzo Worker (const.)	861.381-046
Test Engine Operator (petrol. refin.)	629.281-018
Testing-and-Regulating Technician (tel. & tel.)	822.281-026
Thermometer Tester (inst. & app.)	710.384-030
Tile Setter (const.)	861.381-054
Timer (sport & variety)	660.361-014
Tool-and-Die Maker (mach. shop)	601.280-046
Tool Designer (profess. & kind.)	007.061-026
Tool-Drawing Checker (aircraft-aerospace mfg.)	007.167-022
Tool Grinder I (any indus.)	701.381-018
Tool Grinder Operator (mach. shop)	603.280-038
Tool-Machine Set-Up Operator (mach. shop)	601.280-054
Tool Maker (mach. shop)	601.280-042
Tool Maker, Bench (mach. shop)	601.281-026
Tractor Mechanic (auto. serv.)	620.281-058
Transformer Repairer (any indus.)	724.381-018
Transmission Mechanic (auto. serv.) (Automotive Specialty Shops only)	620.281-062
Treatment-Plant Mechanic (waterworks)	630.281-036
Tree Surgeon (agric.)	408.181-010
Trouble Locator, Test Desk (tel. & tel.)	822.361-03.
Trouble Shooter II (light, heat, & power)	821.261-026
Truck-Body Builder (auto. mfg.; auto. serv.)	807.281-010
Truck-Crane Operator (any indus.)	921.663-062
Tune-Up Mechanic (auto. serv.)	620.281-066
Turbine Operator (light, heat, & power)	952.362-042
Turret-Lathe Set-Up Operator, Tool (mach. shop)	604.280-022
Upholsterer, Inside (furn.)	780.681-010
Violin Maker, Hand (musical inst.)	730.281-046
Wallpaper Printer I (wallpaper)	652.662-014
Waste-Treatment Operator (chem.)	955.382-014
Wastewater-Treatment-Plant Operator (sanitary serv.)	955.362-010
Watch Repairer (clock & watch)	715.281-010
Water-Treatment-Plant Operator (waterworks)	954.382-014
Weather Observer (profess. & kind.)	025.267-014
Web-Press Operator (print. & pub.)	651.362-030
Welder, Arc (welding)	810.384-014
Welder, Combination (welding)	819.384-010
Welder-Fitter (welding)	819.361-010
Welding-Machine Operator, Arc (welding)	810.382-010
Well-Drill Operator (const.)	859.362-010
Wind-Instrument Repairer (any indus.)	730.281-054
Wind-Tunnel Mechanic (aircraft-aerospace mfg.)	627.381-014
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Wirer (office mach.)	729.281-042
Wire Sawyer (stonework)	677.462-014
Wire Weaver, Cloth (wirework)	616.382-014
Wood-Turning-Lathe Operator (woodworking)	664.382-014
X-Ray Equipment Tester (any indus.)	729.281-046

Signed at Washington, D.C. this 28th day of February, 1980.

Charles B. Knapp,

Deputy Assistant Secretary for Employment and Training Administration.

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